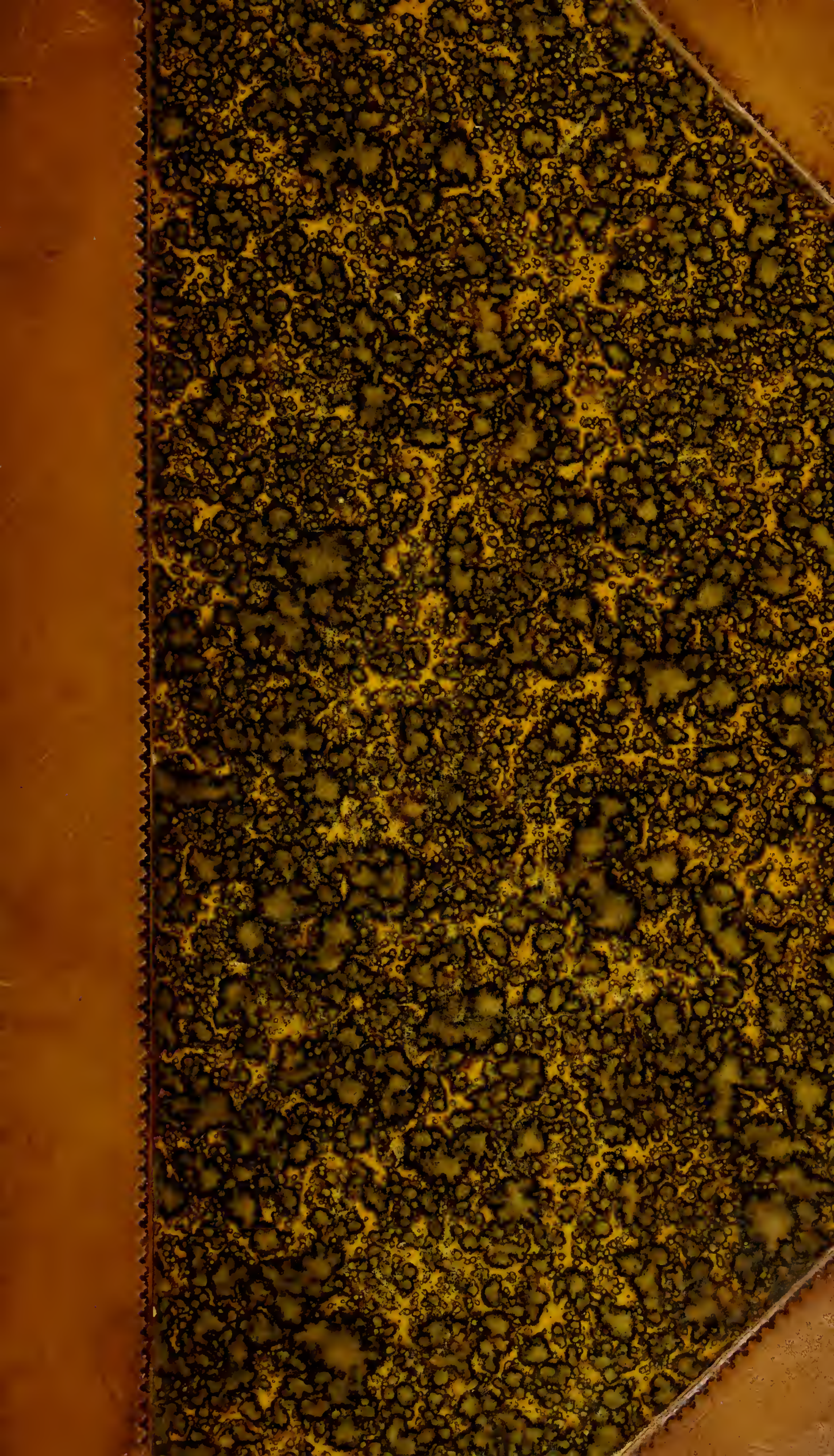

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OBSERVATIONS

ON

JAIL, HOSPITAL, OR SHIP

FEVER,

From the 4th April, 1776, until the 30th April, 1789,

MADE IN VARIOUS PARTS OF

EUROPE AND AMERICA,

AND ON THE

INTERMEDIATE SEAS.

COLL. REG. MED. EDIN.

By ROBERT ROBERTSON, M. D.

PHYSICIAN TO THE ROYAL HOSPITAL, GREENWICH.

Opinionum commenta delet dies; experientiæ judicia confirmat.

A new Edition, much enlarged and improved.

LONDON:

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AND SOLD BY G. G. J. AND J. ROBINSON, PATERNOSTER-ROW.

M DCC LXXXIX.

TO

HIS ROYAL HIGHNESS

PRINCE WILLIAM HENRY,

DUKE OF CLARENCE, &c. &c.

May it pleaſe your Royal Highneſs,

AS Ship Fever, which is the ſubject of the following Obſervations, has often decided the fate of nations, by depopulating cities and garriſons, by mouldering armies, and by rendering the moſt powerful fleets unſerviceable, I preſume that it claims, in a peculiar manner, your Royal Highneſs's attention, leſt it ſhould obſtruct your purſuit of that glory, in which, the intereſt of your country is involved.

This

This new edition of Obſervations on Jail, Hoſpital and Ship Fever is, therefore, with great humility and profound reſpect, inſcribed to your Royal Highneſs; and that your Royal Highneſs may long, in perfect health, be an ornament and patron of the Britiſh Navy, is the moſt ardent wiſh of,

May it pleaſe your Royal Highneſs,

Your Royal Highneſs's

Moſt devoted and moſt obedient,

Humble Servant,

R. ROBERTSON.

Hythe, near Southampton,
18th June, 1789.

OBSERVATIONS, &c.

PART I.

CHAP. I.

SECT. I.

MONTHLY REVIEW OF THE SICK LIST, *From* APRIL 4, *to* AUGUST 31, 1776.

WHEN we failed on the 4th of April from St. Helen's, on our voyage to Quebec, the patients on the ſick liſt were, one with fever; one with eruption; one with itch; one with inflammation; and three with foul ulcer.

The wind varied much and often, though in general it was between the Northward and Eaſtward, until the 12th, when it got round to

E S E. From thence it veered to the S W. On the 15th it was from South to Eaſt; on the 16th, from N E *b* N to N N W, varying to N *b* E, till the 20th, when it came to S W, and varied between that and N *b* E, until the 17th. It then varied from E N E to S S E: on the 28th, and afterwards, got back to the N and N W, ſtill varying. On the 8th, 9th, 15th, 16th, 25th, it blew gales; the 19th, and 20th, it was ſometimes calm. The 11th, 12th, 15th, 17th, 21ſt, 22d, 23d, 24th, 28th, light ſhowers; the 25th ſhowers. The atmoſphere was generally cloudy, ſometimes clear, but ſeldom foggy, except when we croſſed the banks of Newfoundland. The moon was full the day we ſailed, and changed the 18th. The mean height of the thermometer was about 57.

The ſick liſt did not vary much, but rather increaſed regularly until the 23d—decreaſed until the 27th, when it increaſed; and then decreaſed rather, to the end of the month. The number who were added were, thirty with fever; two with ſcurvy; one with rheumatiſm; one with gout; two hectic; one with cough; one with hæmorrhoides; one

with eruption; four with itch; one with ſcald; two with ſtrain; three with contuſion; one with fracture; three with inflammation; one with ſwelling of the knee; two with abſceſs; one with excoriation; and five with ulcer:—in all, 62; including thoſe who were on the liſt the day we ſailed.

I ſent three fever patients to the hoſpital in the month of March. Amongſt the fever patients are included thoſe complaints which are vulgarly called colds accompanied with ſymptoms of fever: a number of thoſe were ſlight, and eaſily carried off; but were ſo claſſed to avoid multiplying diſeaſes, or columns in the general table. This is to be underſtood of all ſuch caſes until the month of September, only we ſhall take notice in the month of Auguſt of ſuch as had ſeverer attacks of fever, the ſymptoms which accompanied it, and the manner in which it was treated. Of other diſeaſes, *it is not my intention to treat.*

MAY.

The wind was as variable as in the preceding month, but much more Weſterly, and always moderate, except the 10th, gales. On

the 1ſt, 2d, 14th, 18th, 19th, 20th, 22d, and 28th, at times it was calm. We had heavy dews the 1ſt and 2d; 4th and 5th, light ſhowers with ſnow; 7th, 18th, ſnow; 8th, 11th, 12th, 15th, 16th, 23d, and 25th, light ſhowers; 9th, 21ſt, ſhowers. The atmoſphere was often very foggy, and wet every thing, particularly in the beginning of the month. Sometimes it was very hazy, at others cloudy, and ſeldom clear.——The moon was full the third, and changed the 17th. The mean height of the thermometer was about 47 deg. It was often very cold in the river of St. Laurence.

The number of ſick firſt increaſed a little, then decreaſed ſomewhat, but varying little until the 12th, when it increaſed, and rather continued doing ſo until the middle of the month, then decreaſed to the 20th. From that time it varied very little until the 27th, when it began to decreaſe, and altered very little from the 28th to the end.—On the 8th grog was begun to be ſerved.—At the end of the month we arrived at Quebec.

The patients added to the ſick liſt this month were, forty with fever; one with quinſey; one

with plethora; one with dyſentery; three with belly-ach; one with ſingultus; one with deafneſs; one with nephritis; one with hæmorrhoides; two with eruption; one with itch; ſeven with contuſion; one with wound; two with inflammation; one with ſwelling of the knee; and eight with abſceſs:—in all, 73.

On the 24th a boy died of fever, which proceeded from a fracture in the neck of the os femoris, and ended in tetanus, or locked jaw. The day before he died, I was informed, he had hurt himſelf at play before he was taken ill. When he came to me firſt, although he complained of pain about the ſuperior and interior part of the thigh, he firmly denied that he had received any hurt; I therefore dropt that idea, until the tetanus came on.

Nothing further material happened in the courſe of the month.

JUNE.

The 5th and 6th the wind varied; as it did alſo on the 12th, 17th, 19th, and 20th; but was then chiefly SW.—Otherwiſe it was NE, or ENE. Then it was SW or Weſterly with calms, until the 25th, and from that time varied

ried until the end of the month; and all along, excepting the 13th and 14th, gales, it was light airs or freſh breezes. The 1ſt and 4th, light ſhowers; 6th, ſhowers with thunder; 9th, 13th, 14th, 16th, 17th, 18th, 19th, 24th, 26th, and 28th light ſhowers, with *t* and *l*; 20th, light ſhowers, with *h t* and *l*; 22d, ſhowers, *h t l*; 23d, ſhowers, *t l*. The atmoſphere was often clear, eſpecially in the beginning, but was more generally cloudy throughout the month. The 3d the moon was full, and changed the 16th.

Excepting the firſt day, the ſick liſt rather decreaſed until the 8th, when it increaſed, and the following patients were ſent to the hoſpital;—one with fever (a weak man); one with ſcurvy; one with gout; two with cough; one with epilepſy; one with eruption; and three with ulcer. It increaſed until the 12th, decreaſed until the 15th, increaſed until the 18th, varied little until the 27th, and decreaſed again.

The patients who complained this month were, ſixteen of fever; one of pleuriſy; five of dyſentery; two of ſcurvy; one of rheumatiſm; two of gout; one with hæmorrhage; two with cough; one with epilepſy; one with

Part. itch;

itch; one with rupture; eight with contuſion; and one of excoriation:—42 in all.

The ſhip's company were ſerved freſh beef on Saturdays and Sundays; and ſpruce beer after the 8th.——The hoſpital was a ſhocking houſe, and under a very high hill, cloſe to the river on the Point Levi ſide. Before we arrived, the ſick ſeamen were taken into the general army hoſpital.—On the 24th, the pleuritic patient was ſent to the hoſpital in a convaleſcent ſtate; and ſeven of them who were ſent on the 8th, returned on board; and on the 25th I applied to have them invalided. Two of the fever patients were ſent ſmall-pox patients to the hoſpital: one of them, who was ſeized ſeveral days before with the ſymptoms which commonly appear before the eruption, had ſeen a man ill of the ſmall-pox at the hoſpital, who died there; but they are claſſed fever patients, becauſe it was uncertain if it was the ſmall-pox.—Thirteen in all were ſent to the hoſpital.

On the 8th the patient died of ſingultus.

Every thing at market was very dear. Scarce any ſort of vegetables.

JULY.

Excepting the 2d and 16th, when it was ENE, the wind varied backwards and forwards from S *b* W round to NW, until the 18th, with moderate gales; from the 9th to the 16th calms AM. It then got round to the NE, till the 21ſt, when it varied, and was calm part of the day. It again came to SW, blowing moderately with little variation until the 29th; AM commonly calm, after which it was variable. 1ſt, light ſhowers, *t l*; 2d, ditto, *l*; 4th, 11th, 12th, ſhowers, *t l*; 5th, 17th, 22d, 24th, 26th, 28th, 31ſt, light ſhowers; 7th, *l*; 9th, 16th, ſhowers; 21ſt, light ſhowers, *t*; 29th, hard ſhowers. The atmoſphere was cloudy and clear alternately, but not quite regularly ſo every other day. The moon was full the 1ſt, changed the 15th, and was full the 30th. The mean height of the thermometer was about 66 deg. —It was lower in the city at noon, than in the lower town, or on board of our ſhip.

The ſick liſt varied little, but increaſed towards the middle of the month; from which time it decreaſed until the 26th, when it in-

creaſed; decreaſed for two days again, and increaſed to the end.

The patients who complained this month were, ſeven of fever; one of dyſentery; one of belly-ach; three of ſcurvy; two of rheumatiſm; one of ſore throat; four of cough; one of epilepſy; one of ſtrain; five of contuſion; one of fracture; one of wound; one of inflammation; two of abſceſs; and one of ulcer:—32 in all. So that as the weather became mild and warm, the ſick liſt decreaſed.—But this will be more attended to next month.

We had ſome marines ſent on board a tranſport to guard priſoners.—Every thing aſhore at market, except vegetables (which were ſtill ſcarce, became much cheaper. The ſcurvy had hitherto been the moſt prevalent diſeaſe in the hoſpital, ſince it was eſtabliſhed. The Triton ſent a number of ſcorbutic patients to it; but the men having got ſpirits to buy at the Brunſwick camp, which was on the top of the hill, lived irregular. Very few were ſeized with ſmall-pox aſhore. I ſent two ſcorbutic patients to the hoſpital, one with ſmall-pox, and one with fever.—Towards the end of the month, the Pearl returned from a cruize in

the

the Gulph, with many of the people ſcorbutic: they had blowing foggy weather. We were now ſerved freſh beef three times a week.

The Brunſwick troops had a very mortal fever among them; the following ſhort account of it I had from the ſurgeon general to the garriſon.

"That they were generally bad three days before they were brought to the hoſpital; that they were then delirious, with their tongues black and chopt, and their teeth covered with ſordes; that they had petechiæ, and a flux on them; and that they generally died within 48 hours after their admiſſion. That he obſerved no remiſſion of the fever; that their pulſes never indicated a ſtrong fever, nor even danger; but all who were ſo ill at their admiſſion as not to be able to put out their tongues to ſhow them when deſired, died. That he ordered them, as ſoon as they were admitted, to be well waſhed in warm water and vinegar, and the bark to be given them freely, with Port wine." And concluded with ſaying, upon my enquiry if he had made uſe of bliſters, "That he did not approve of them in fevers with petechiæ; but that he perhaps might have applied them,

had the patients been brought to the hoſpital when they were firſt taken ill."

AUGUST.

The 1ſt and 2d the wind was variable, but Eaſterly; from the 3d to the 8th, it was from W S W to S W, varying a great deal; but ſtill more from the 8th to the 11th, when it came to the Eaſtward, and continued ſo until the 14th; it then veered to the S W, continued there until the 26th, varying little the laſt ſix or ſeven days. Now it veered from W N W to E N E, and continued there, with little variation, until the laſt day of the month, when it got to the W S W.—All the month was moderate, and on the 2d, 14th, 15th, 21ſt, 30th, and 31ſt, at times calm; 2d, 3d, light ſhowers, *t l*; 7th, 8th, 9th, 13th, 25th, light ſhowers; 16th, 21ſt, ſhowers, *t l*. Until the 21ſt, the atmoſphere was very ſeldom otherwiſe than clear; but the 18th was foggy and hazy; from that time until the end, it was almoſt cloudy or hazy; 26th and 28th, ſometimes foggy. The moon was new the 14th, and full the 29th. The mean height of the thermometer was 65 deg. But it is to be obſerved,

ſerved, that we left Quebec the 23d, and that the thermometer became gradually lower as we got down the river, ſo that in eight days it was 9 deg. lower than it was the day we left Quebec: it continued lower while we were at Bique-iſland.

On the 5th, two of our men, one with ſcurvy (one of the marines that were on board the tranſport), the other with fever, were ſent to the hoſpital; and one with cough on the 13th.—The liſt decreaſed until the 16th, when it increaſed, varied for two days, and decreaſed on the 19th, then continued without alteration until the 23d, when our four men came from the hoſpital; after which it varied until the end, but rather increaſed.

On the 13th, two of our men were invalided by ſurvey. We were ſerved freſh beef every meat-day, ſome time before we left Quebec. The 26th we arrived at Bique-iſland, where our men were employed to cut wood for the ſhip's uſe—and ſailed from thence on the 31ſt.

The patients who were added to the liſt were, three with fever, one with head-ach, nine with dyſenteric complaints, two with

belly-ach, one with ſcurvy, one with rheumatiſm, one conſumptive or hectic patient, two with ſore throat, three with cough, one with deafneſs, one with giddineſs, one with eruption, one with ſtrain, one with contuſion, three with wound, one with inflammation, one with abſceſs, and one with furuncle:— in all 34.

SECT. II.

Obſervations on the FEVER *of the preceding Months.*

WE are now come to a period wherein a very important change of the health of the ſhip's company began to appear; but it may not be improper firſt to enumerate the ſymptoms of the fever which hitherto affected the people, that they may be compared with thoſe which occurred in the enſuing months. However, it is not intended to draw this compariſon at preſent to minuteneſs, but to repreſent, if poſſible, the characteriſtic marks of ſhip-fever, as inſerted in the introduction. The particular

deſcription

deſcription thereof will more properly follow the diary of the ſick liſt and monthly review.

Many of thoſe who in the preceding months are ranged as fever patients, were ſo ſlightly affected, as to bring them, not very improperly, within the vulgar denomination of colds; although, as they had all at leaſt *ſome* feveriſh ſymptoms, for the reaſon before-mentioned, I have claſſed them as fevers, to avoid the multiplying of columns of diſeaſes in the tables, as already mentioned.

The ſymptoms of ſuch patients were mild intermitting complaints. The pulſe was very different in different patients; thirſt, loathing of food, ſickneſs at ſtomach, head-ach, cough, ſore throat, hoarſeneſs, acute pains of the ſides, pain of the back, and in all their bones (as they expreſs themſelves), or univerſal pains, ſtraitneſs about the breaſt, griping complaints, deafneſs accompanying a ſort throat (though this was very ſeldom), giddineſs, eſpecially in the month of May, and conſtipations.

I thought it neceſſary to take away blood in ſome caſes only. Gentle evacuations by vomit and ſtool, promoting a moderate diaphoreſis with eſſence of antimony or tartar emetic, to-

gether with opium, or tinct. theb. ſometimes; boluſſes of ſperma-ceti and nitre, or the oily mixture, repeated as there was occaſion, with diluting drink, and the volatile liniment applied to the throat, carried their complaints off in a few days.

Although thoſe were the moſt general ſymptoms, yet many had the fever in a ſeverer manner, as appears from the ſymptoms and their duration, which are collected from *all their caſes*, and enumerated daily. But neither the pleuritic caſe, nor two others (which were occaſioned by putting a corpſe into a coffin) are made mention of; though theſe two indeed were ſlight. It is not, therefore, to be underſtood that all the ſymptoms which are enumerated in any one day, occurred in a ſingle caſe.

1. They were ſeized with chillneſs and rigors, ſucceeded by heats, thirſt, and univerſal pains and uneaſineſs; pains in the ſide and back, difficulty of breathing, tightneſs about the throat, great hoarſeneſs, cough, head-ach, giddineſs, and ſickneſs at the ſtomach; the pulſe quick and full.

2. Some had very reſtleſs nights, without any remiſſion from head-ach, and a pain that went round in the direction of the diaphragm, eſpecially with cough, which was dry and urgent; and from pain of the breaſt that affected reſpiration, the countenance was fluſhed, and the eyes watered; remiſſions, paroxyſms, coſtiveneſs, profuſe ſweats, the thirſt continued, and the pulſe was in ſome full and quick.

3. The paroxyſms continued above twelve hours, with the ſymptoms as ſevere as in the firſt paroxyſm; pains in the knees, and about the ſhoulders, a frequent cough, and ſcarce any expectoration; a little cough, and pain only.

4. Though cool, there was a dry, urgent cough, with pain at the ſcrobiculus cordis; the remiſſion continued ſix hours, and the next paroxyſm eight. Stiffneſs about the eyes, weakneſs, pain of the breaſt, and head-ach from cough, though expectoration began.

5. Profuſe ſweat the preceding night, a very teazing cough, weakneſs, with much pain about the breaſt, and either no expectoration, or a difficult one in ſome caſes; no appetite, and the tongue white.—On the 5th, of the

ſlight fever, the pulſe of a man who was ſubject to epilepſy, became quick and full, with giddineſs and head-ach.

6. In the epileptic caſe there was a degree of ſtupor.—P M an acceſſion of fever; the ſkin was hot and dry, the tongue parched; thirſt; large quantities of urine, and languor; though ſome were recovering.

7. In the epileptic caſe, the paroxyſm went off in the night, by a large quantity of urine, and a copious ſtool. P M a paroxyſm came on—an acceſſion of fever happened after the patient had been in a recovering ſtate for four days,—weakneſs—recovering ſlowly.

8. A difficult reſpiration, with cough—pain of the back and weakneſs—ſome recovering—the paroxyſm of the epileptic caſe ended as the preceding. P M a paroxyſm came on.

9. Cough and hoarſeneſs continued—the epileptic patient uncertain when the paroxyſm left him, and complained of his back.

10. A free expectoration, and recovering—the epileptic man paſſed an indifferent night; his head ached and was giddy, and his mouth and tongue were foul.

11. The epileptic patient had ſhooting pains in his head at times, but was recovering.—One recovered. *

12. It was diſcovered that the epileptic patient was very louſy, though recovering.—Hoarſeneſs continued—weakneſs.

13. It was a conſiderable time before he recovered his ſpirits, and he was invalided the 25th of June.

18. One patient continued weak, and was ſent to the hoſpital; but this man had hurt his breaſt not long before by a fall.

* TIDFORD, by bark.

The Method of Cure.

IT was not a general rule with me to let blood;—that depending ſolely on circumſtances. A vomit was moſt commonly given at firſt; and if the patient was bled, the vomit was given a few hours after, and from xxv. to xl. drops of Eſſent. Antimon. with refrigerating and diluting drink at night. Next morning an ounce of ſalts was given, and the eſſence of antimony repeated in the evening. After thoſe moderate evacuations (which were ſeldom repeated) I preſcribed Cort. Peruv. ʒi. or ʒiſs. every hour, until the patient was out of danger; and afterwards it was given leſs frequent, and at this time Elix. Vitr. was often joined with it. After I began to give the bark, I did not omit it for any exacerbation of the ſymptoms.

CHAP. II.

SECT. I.

A

DIARY

OF THE

WEATHER,

From SEPTEMBER 1, 1776, *until* JUNE 30, 1777.

Year, M. & Day	Therm.	Latitude, or, different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1776 Die Sab. Sept. 1	60	Off Cape Moriere, 48° 58″		19	*v* W *b* S *	*cl*	o
2	60	a & f		20	*v* S W *b* W *	*ch*	
3	63	Hills-burgh bay		21	*v* N W *b* W *	*ch*	
4	65			22	*v* SE *b* E * *	*cl*	o
5	61½			23	*v* SE *b* E * *	*cl*	
6	61	f		24	N *v* * *	*ch*	o
7	63	Off Madame		25	N *v* —	*c*	
8	64	44 45	00° 51″ W	26	*f* SSW *t* W * * * *	*cl f*	o o
9	61	Off Cape Breton, 45 23		27	N W * *	*c*	
10	61½	44 42 a pm. Beaver-harbour.		28	*f* N W *t* S W * *	*ch*	
11	63½			29	S * *	*f cl*	o
12	60	am. f		n m	N N W *	*c*	
13	63½	am. a Halifax, 44 45	in 64 35 W	1	S W *v* *	*c*	
14	65			2	*v* * *	*cl*	
15	65			3	*v* W *b* S *	*h f*	o o

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1776 Sept. 16	56			4	NW * *	c	
17	56½			5	NW * *	cl	
18	63			6	v W *	ch	
19	64			7	v NNW *	c	
20	61½			8	NW b N *	c	
21	64			9	S v *	cl	
22	65½			10	v SW *	ch f & c	o o
23	64½			11	SSE *	ch f & c	
24	57½			12	NNW *	f	o o o
25	57½			13	NNW * . * *	ch	o
26	59½	f		14	W * *	c	
27	60½	44° 06″		p	SW v * *	cl	
28	55½	43 29		16	NNW * *	c	
29	55½	43 30 a pm Le Have		17	v * * *	ch	
30	59			18	SSW * *	f	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1776 Oct 1 Die Mart	59½	am. f		19	NW *	c	
2	54	43° 49″		20	WNW v * *	c	
3	56	42 50	00° 33″W made.	21	ESE v * *	c	
4	58½	42 36	01 09 W	22	ESE v * *	f	o
5	58	42 42	01 01 W	23	ENE * *	ch	
6	54½	42 56	01 03 W	24	ENE v *	ch	o
7	59	43 15	01 56 W	25	E v * *	ch	
8	58½	43 03	01 49 W	26	SE v *	ch	
9	60½	42 58	01 56 W	27	WSW *	ch	o
10	60	43 07	00 06 E	28	NNW v * *	ch	o
11	53½	44 06	01 04 E	29	v NbW * *	cl	o
12	49	44 09 pm. a Halifax		n pm	WSW * *	c	
13	53			1	WSW v * *	c	
14	53			2	WNW *	cl	h f
15	53			3	v * *	c	

Year, M. & Day.	Therm.	Lattitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1776 Oct. 16	54			4	S *b* E — *	*ch*	
17	58½			5	*v* * —	*cl*	o o
18	61½			6	SE *v* * *	*cl*	
19	58½	am. f		7	W *v* * *	*cl*	o
20	57½	Le Have 43° 50′′		8	NW *v* *** .. *	*cl*	
21	58½			9	SW *v* * * *	*cl*	
22	53			10	NW *b* W *v* * * *	*cl*	o
23	52	am. f 44 01 pm. a Le Have		11	WNW WSW *v* * *	*h*	
24	58			12	SW *v* * *	*cl*	
25	61			13	SW *v* * *	*f*	o o *t l*
26	60	am. f 44 03		14	NE *v* *	*ch*	o
27	57½	43 10	00° 51′′ W	p am	NW *v* *	*f*	
28	55½	43 47 off Cape St. Mary		16	*v* * *	*ch*	o
29	53	43 46	01 10 W	17	NNW *v* * . * *	*ch*	o
30	47	Bay of Fundy pm. a		18	NNW *v* * . * *	*cl*	
31	50			19	S W * * *	*ch*	o o

Year, M. & Day.	Therm.	Latitude or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1776 Nov. 1 Die Ven.	58½			20	v NNW *	ch	o
2	52			21	WNW v * . * *	cl	o o
3	46½	am. f		22	v NNW * . * *	cl	ſ o
4	46½			23	v SW * . * *	cl	ſ
5	52	Off Annapolis pm. a		24	SW v * . * *	cl	
6	56			25	SW * —	cl	
7	55½	am. f		26	NE * . * *	f	
8	56	43° 15″		27	Nly v * *	h	
9	54	Cruising		28	v NNE *	h	
10	57	Off Segvin a		29	v W * —	h	
11	55	43 29	00° 51″E made	n am	ENE v * *	ch	
12	49½	43 20		2	f NNE t NNW * *	ch	
13	50			3	NW v *	c	
14	49	43 58		4	NW v * *	c	
15	49½	31		5	Nly v * —	cl	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1776 Nov. 16	50½	43° 48″		6	S W *v* * · * *	*c*	
17	48½	43 20		7	*f* N*b*E *t* NW * *	*c*	
18	46½	42 54	01° 05″E made	8	Nly *v* *	*c*	
19	48½	43 00	02 40 E	9	Nly *v* *	*cl*	
20	52½	43 20		10	*v* *	*cl*	
21	55	43 32		11	SW *v* * · * *	*c*	
22	55½	Halifax am. a		12	SW *v* * · * *	*cl*	
23	57			13	SW *	*cl*	o
24	58			14	S*b*E *v* * —	*h*	o
25	57			15	SE *	*f*	
26	59			16	S W * *	*f*	
27	60			17	NNW * —	*f*	o
28	56½	pm. f & a		18	NW *v* * · * *	*ch*	o
29	52½			19	Wly *	*c*	
	55			20	ESE *v* * *	*f*	o o

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1776 Dec. 1 Die Sab.	55			21	*v* * *	*cl*	o
2	51			22	WNW *v* * *	*cl*	*f* o
3	45			23	*v* NW *	*ch*	*f* o
4	53			24	SSW *v* * *	*ch*	o o
5	49			25	NW *v* * *	*cl*	
6	46½	f		26	Nly *v* *	*c*	
7	51	43° 27″	00° 34″E made	27	Wly *v* * *	*cl*	
8	53½	42 25	00 48 E	28	Wly *v* * *	*cl*	
9	51½	41 24	00 21 E	29	NNW *v* * * *	*cl*	
10	49	40 22.	00 08W	n	N *v* * * *	*cl*	o *f h*
11	55	39 12	00 42W	1	NNW *v* * *	*ch*	o
12	57½	39 17	02 50W	2	SE *v* * * *	*cl*	o
13	61½	38 34	03 30W	3	NNE *v* * * *	*cl*	
14	63	39 45	04 24W	4	*v* W * * *	*cl*	o
15	54½	39 13	in 04 13W	5	NNW *v* * * *	*cl*	
16	59	39 15	04 36	6	W *v* * * *	*cl*	o o

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1776 Dec. 17	56½	38° 53″	05° 41″	7	NE *v* * *	*ch*	o
18	58	38 06	07 30	8	*f* W*b*N *t* NW*b*W * * *	*cl*	
19	55½	37 45	07 02	9	N * * *	*cl*	*f*
20	57½	37 34	08 12	10	N *v* * *	*cl*	o
21	63	39 15	09 04	11	SE *v* * * *	*cl*	o o *l*
22	56½	39 52	08 36	12	*v* W*b*N * * *	*cl*	*f* o
23	53½	40 01	08 07	13	NW*b*W *v* * *	*cl*	
24	51½	38 34	08 56	14	Nly *v* * *	*ch*	
25	50	38 54	10 07	15	NE *v* * *	*cl*	
26	56	40 12	11 15	16	E*b*N *v* * * *	*cl*	o o
27	54	39 45	10 51	17	NW *v* *	*ch*	
28	51	39 35	11 20	18	NNW *v* * *	*cl*	*f*
29	46½	39 30	12 57 W	19	N *v* * *	*cl*	
30	50½	Off Egg island.		20	SW *v* *	*h*	
31	50½	Sandy Hook. pm 2.		21	ENE *v* *	*cl*	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1777 Jan. 1 Die. Mer.	53	f N. York a North River		22	S E *	cl	
2	46½			23	N W * *	c	
3	42½			24	N W *	cl	f
4	42½			25	N W N * *	cl	f
5	41½			26	N W *	cl	f
6	41			27	N W *	c	f
7	38½			28	N W N * *	c	f
8	38			29	N W N * *	cl	f
9	39			n am	W N W * *	cl	ſ
10	36 25			2	N W W *	cl	f
11	39			3	W N W v * *	cl	f
12	39			4	N W * *	c	f
13	39½			5	N W * *	c	f
14	39½			6	N W * *	c	f
15	41½			7	W N W * *	c	f

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1777 Jan. 16	48			8	SW * *	*h*	*ſ*
17	44			9	N W * *	*c*	*f*
18	42			10	N N W * *	*c*	*f*
19	43			11	S * *	*h*	*f*
20	46			12	NW SW * *	*ch*	
21	52 F			13	*f* S S W *t* N W *	*ch*	
22	46			14	N *v* *	*cl*	
23	45			15	*v* *	*h*	*ſ*
24	48½			16	*v* * * * *	*cl*	o o
25	52½			17	W *v* *	*cl*	
26	52			18	NE *v* *	*cl*	
27	50½			19	*v* *	*cl*	
28	48			20	NE *	*cl*	
29	47½	New York		21	NE *v* *	*h*	*ſ*
30	46½			22	NW NNW * *	*cl*	*ſ*
31	47			23	N W *v*	*ch*	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1777 Feb. 1 Die Sat.	46½			24	W *	c	
2	50½	f & a bet. L. Island & N. York		25	SW *	cl	
3	47	f		26	NW *	c	
4	42½	41° 08′ pm. a off Gardiners island.		27	N v * —	c	f
5	47	f & pm. a Rhode Isl.		28	S v * *	h	
6	39			29	NW * *	c	f
7	39			n	NW * * *	c	f
8	43			1	SE * *	cl	○ f
9	47			2	NW * * *	c	
10	46½			3	SW * *	ch	
11	43			4	v f SE t NE * * *	ch	○ ○ ſ f
12	40			5	WNW * * *	cl	
13	34	f		6	E v *	c	f
14	39½	Off Long island.		7	v NNE * *	cl	ſ

Year, M. & Day,	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1777 Feb. 15	38	pm. a Block isl.		8	*v* N W * *	*cl*	*f*
16	39½	am. f		9	WNW *v* * *	*cl*	*f*
17	43½	Cruising.		10	N W *	*h*	*ſ*
18	42½			11	N W * *	*cl*	*ſ*
19	35			12	*f* N*t* NW *	*c*	*f*
20	29½	Block isl. pm. a		13	N W * *	*c*	*f*
21	29	am. f		14	N W * —	*cl*	*f*
22	38	Cruising.		p	NNW *v* *	*ch*	*ſ*
23	41½			16	N N E *v* * *	*h*	*ſ*
24	44	39° 50″	00° 09″ E	17	*v* E * * *	*ch*	o o *ſ*
25	42½	39 27	00 50 W	18	N N W * * *	*cl*	o *ſ*
26	44	39 51	00 25 W	19	W N W * *	*c*	
27	43			20	W S W *v* *	*ch*	
28	38	40 20		21	NW *v* *	*ch*	*f*

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1777 Mar. 1 Die Sat.	38½			22	NWbN v * * *	f	ſ
2	34½			23	N E v * *	ch	ſ
3	36	40° 42′/		24	v * *	c	f
4	47	pm. a Block iſl.		25	f WSW t SWbS * *	ch	ſ
5	36	f		26	WNW v * *	ch	o f
6	41½	Cruiſing.		27	E v * * *	h	o o ſ
7	44½			28	N v * *	h	o o ſ
8	46			29	v *	h	
9	48			n m	f SSW t SSE *	h	o
10	47			2	WSW *	c	
11	47			3	v SSW *	c	
12	47½			4	f SSE t SW b W * *	f	o
13	49			5	f NNE t NW b W * *	ch	o o
14	47	Rhode iſl. pm. a		6	NW v * *	c	
15	47			7	SW * *	h	
16	48½			8	SW v * *	h	

Year, M. & Day.	Therm.	Latitude, or, different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1777 Mar. 17	49	am. f pm. a Block isl.		9	Wly * *	c	
18	47	am. f Long isl. pm. a		10	W S W * *	c	
19	47	Plum isl. a am.		11	Wly *	c	
20	48	Sheller isl. f am. & a		12	Ely * * *	f	o o o
21	48½			13	Wly * *	c	
22	48			14	f W b N t S W * *	c	
23	47			P	Wly * *	c	
24	47			16	f SW t N W *	cl	
25	45½			17	NW * *	c	
26	41			18	NW * *	c	f
27	42½	Rhode isl. am. f pm. a		19	NW * *	c	
28	35			20	NW * *	c	f
29	41			21	SW * *	cl	o
30	46½	Off Prudence f & a		22	SW *	ch	
31	48½			23	NW v * *	ch	o

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 April 1 Die Mar.	47			24	SW *	*ch*	
2	47			25	Nly *	*c*	
3	48½			26	*v* *	*f*	o o
4	42			27	NW * *	*c*	*f*
5	42½			28	NW SW * *	*c*	*f*
6	46½			29	Sly * *	*c*	
7	47½			n	SSW * *	*h*	
8	49½			1	SSW * *	*h*	
9	51			2	*v* *	*h*	
10	50½			3	*v* * —	*f*	o
11	51½			4	NW *v* * *	*ch*	o
12	51½			5	*v* *	*c*	
13	52			6	Sly * *	*cl*	o o
14	55			7	* * * NW	*c*	
15	46			8	NW *	*c*	*f*

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph	Rain, dew, thunder, hail, snow, &c.
1777 April 16	48½			9	Sly *	*h*	
17	51½			10	Nly *	*k*	o
18	52			11	*v* * *	*f*	o
19	52			12	E *v* *	*f*	o
20	51½			13	NE * *	*f*	
21	52			14	*v* *	*f*	
22	52			15	Sly *	*f*	
23	55			16	NE * *	*h*	
24	55			17	Nly * *	*h*	
25	54			18	N * *	*h*	o
26	52			19	Sly *	*h*	o
27	52			20	Nly *v* *	*ch*	o
28	51			21	NW *	*c*	
29	48			22	*v* *	*cl*	
30	48			23	NW SW * *	*cl*	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	☽'s Age	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow, &c.
1777 May 1 Die Jovis	48			24	SE Nly * * *	*cl*	o o
2	47½			25	N W * *	*c*	
3	50			26	S W *	*c*	
4	53			27	Sly *	*ch*	o
5	54			28	Nly *v* *	*ch*	o o
6	55			29	Nly *	*c*	
7	53½			n	S E * *	*h*	o
8	54½			1	Sly *	*h*	
9	54			2	N E *	*cl*	o o
10	54			3	Nly *	*cl*	
11	53			4	*v* *	*cl*	o
12	48			5	N W *v* * *	*ch*	o
13	48½			6	N W * *	*cl*	*h*
14	50½			7	S W * *	*c*	
15	53			8	S W * *	*c*	
16	55			9	Sly * *	*ch*	o o

Year, M. & Day	Therm.	Latitude or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew, thunder, hail, snow, &c.
1777 May 17	55½			10	Sly * *	*ch*	o
18	56½			11	Sly *	*cl*	o
19	58½			12	Sly *	*cl*	o
20	59			13	*v* *	*cl*	o
21	58½			14	*v* * *	*c*	
22	57			p	NW * *	*c*	
23	58			16	NW * *	*c*	
24	60			17	Sly * *	*c*	
25	59½			18	Nly * *	*c*	
26	59			19	Nly * *	*h*	
27	54½			20	NE * * *	*ch*	
28	55½			21	*v* * *	*c*	
29	59½	am. f pm. a		22	Sly *	*c*	*d*
30	59½	f & a		23	Sly *	*c*	
31	63	New Port		24	Sly *	*c*	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 1 Die Sab. Junii	64			25	Sly * —	*c*	
2	63	pm. f		26	SW * —	*ch*	
3	62½	40° 41′′	00° 24′′E made	27	WSW * *	*f*	*l*
4	62½	40 05	02 04 E	28	NW *v* *	*c*	
5	59½	41 51	02 50	n	SW *v* * *	*c*	
6	59	42 55	02 31	1	Wly * *	*c*	
7	60	43 28		2	NNW *v* * —	*ch*	
8	60	42 28		3	*v* * *	*h*	
9	60½	42 04 Off Cape Cod.		4	SE *	*h*	o
10	60	42 04		5	SSE * —	*ch*	
11	62	Off Cape Cod.		6	Nly *	*h*	
12	61½	42 50	00 46 E made	7	SE *v* * *	*f*	o
13	59	42 54	01 00	8	NE *v* * *	*f*	
14	59	Cruising.		9	*v* *	*c*	
15	61			10	Sly * —	*ch*	

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, de thun er, hail, snow, &c.
1777 June 16	62½			11	SSW *v* * —	*f*	o o *t!*
17	63½			12	*v* * —	*ch*	o *t l*
18	62½	42° 14″		13	*v* * *	*ch*	
19	62½	42 00	00° 39″ E	14	Nly *v* *	*ch*	
20	62	42 00	01 12	p	Nly *v* *	*ch*	
21	63	42 10	00 38	16	Nly *	*ch*	
22	61½	41 17		17	Ely *v* * *	*ch*	
23	60	Cruising.		18	Sly * * *	*ch*	o
24	61	42 02		19	S * *	*ch*	o
25	63½	42 31		20	WNW *v* *	*h*	
26	63½	42 26		21	SW *v* *	*h*	*l*
27	67	pm. Cape Cod Bay.		22	Sly * *	*cl*	
28	68½	Cape Cod Harbour.		23	SSW *	*h*	
29	68			24	Sly *v* *	*h*	
30	68½			25	Sly *v* * —	*h*	

SECTION II.

A DIARY *of the* SICK LIST, *with ſuch Occurrences as might be ſuppoſed to affect the Men's Health, from Sept.* 1, 1776, *till June* 30, 1777.

SEPTEMBER.

1. THERE were on the ſick liſt, two with dyſentery; one with ſcurvy; one with ſciatica; one with conſumption, or hectic; one with cough; one with deafneſs; one with ſtrain:—8 in all.—We were now ſailing down the river St. Laurence.

2. The patient with ſciatica, and the other with ſtrain, recovered: 6 remained on the liſt. We caught a few cod, and anchored for two hours off the iſland of St. John.

3. No alteration of the ſick liſt.—Off Hillſborough-bay at anchor. A M a boat was ſent up the river after the Lizard, with orders for Capt. Mackenzie.

4. One of the dyſenteric patients recovered, and three were added to the liſt with dyſen-

teric ſymptoms:—8 in all. Weighed, and anchored in the bay.—Nothing to be bought on ſhore, the rebels having plundered the few inhabitants of every thing.—A fever on board the Lizard, and likewiſe on ſhore.

5. The patient with deafneſs recovered; and one with abſceſs was added;—8 on the liſt. They are eat up with field-mice on ſhore.

6. One of the patients who were added the 4th, recovered; and one complained of ophthalmia:—8 on the ſick liſt. The inhabitants ſay, that they caught the fever from the Lizard, or an armed veſſel that was very ſickly, which the Lizard relieved; and I have ſince been informed, it was from that veſſel that the Lizard's people got the infection. We bought a few bad and very dear vegetables, and a little milk for the ſcorbutic patient, a boy.—Sailed at noon.

7. Another of thoſe who were added to the liſt on the 4th, is well,—7 remain. A M we ſailed through the gut of Canceaux; and P M we caught a few cod oppoſite Iſle Madame.

8. One complained of dyſentery, and one

of abſceſs:—9 on the liſt. A very diſagreeable day.

9. One complained of contuſion:—10 on the liſt. We caught a few fiſh off Cape Breton.

10. The flux patient of the 8th recovered; one complained of dyſentery, as did alſo the patient with the cough; and one of fever, who belonged to the cutter, and had been on board the Lizard:—12 on the ſick liſt. Query, Do the fiſh our men catch contribute to the dyſenteric ſymptoms among them?——PM we anchored in Beaver Harbour; one family, on ſhore at this place, only.

11. The patient added yeſterday with the fever, is well:—11 on the liſt. Our men caught plenty of fiſh alongſide of the ſhip, and trucked with the fiſhermen for dry fiſh, milk, and potatoes. An Indian and his ſquaw came on board.

12. The patient who complained on the 10th of the dyſentery, is well:—10 on the liſt. AM we ſailed.

13. No alteration in the ſick liſt. We anchored in Halifax harbour; the Milford, and three armed veſſels, here.

14. The other patient of the 4th, one of the 5th, and one of the 8th, with abſceſs, and another of the 10th, with head-ach, recovered:—6 on the liſt.

15. No alteration of the ſick liſt; we were ſerved freſh beef; forty of our men ſent up into the wood on duty, with two gentlemen of the quarter-deck and a ſerjeant.

16. One complained of fever yeſterday P M, who had two paroxyſms before he complained: am informed that he was one of the cutter's crew, the boat which was on board the Lizard at St. John's:—7 on the ſick liſt. Spruce beer was begun to be ſerved to the ſhip's company. I propoſed to the captain to have a tent erected on ſhore for the ſick, but he would not allow it.—Many of our people, eſpecially the marines, got drunk, were ungovernable, and ſtaid on ſhore all night.

17. The patient who was added yeſterday recovered. Three complained of dyſenteric ſymptoms:—9 on the liſt.

18. One complained of hæmorrhoides ſanguinoſæ:—10 on the liſt. The men have freſh beef ſerved them four times a week, and

ſoft bread. The ſcorbutic patient very ill; men ſent to-day to the wood.

19. The other dyſenteric patient, who was on the liſt the 1ſt (he was added the 29th ult. with head-ach), and one of thoſe added the 27th, recovered. One complained of wound, one of ſtrain, and one of contuſion:—11 in all.

20. Another of thoſe added the 17th, is well. One complained of dyſentery:—11 on the liſt. Some of the ſick ſent aſhore to walk.

21. The patient of the 18th recovered; and one added with ſtrain:—11 in all. His Majeſty's ſhip Rainbow came in from New-York.

22. The patient who had an old cough, returned to duty; and the other of the 17th, is well. Two added with fever, one of whom was returned well on the 19th, only; he formerly belonged to a boat; the other was one of the long boat's crew, I believe, and was on board the Lizard:—11 on the ſick liſt.

23. One complained of the belly-ach,---12 on the ſick liſt.

24. The contuſed patient of the 19th, well; three with dyſenteric ſymptoms added to the ſick liſt:—14 in all. A very wet, diſagreeable day.

25. The patient added the 20th, and two of thoſe added yeſterday, are well; one complained of wound:—12 on the ſick liſt.

26. One of thoſe added the 22d, recovered, and the other patient of the 24th is well; one complained of feveriſh ſymptoms:—11 on the liſt. A M we ſailed on a cruiſe.

27. No alteration of the liſt. One complained of wound who does duty. Indifferent weather.

28. The patient added the 26th, recovered; and the dyſenteric patient returned to duty the 26th, relapſed; one complained of an old ſtrain, and one of ſcald:—13 in the liſt.

29. One complained of old eruptions, who does duty. P M we anchored in Le Have harbour. It blew hard in the night.

30. The contuſed patient of the 9th, the dyſenteric patient, one with ſcald, added the 20th, and one with a ſlight complaint, recovered;

vered; one (a marine) complained of fever, with dyſenteric ſymptoms. Ten on the liſt, viz. two with fever; one with ſcurvy; one with conſumption; one with ophthalmia; two with ſtrain; one with contuſion; and two with wound.

OCTOBER.

1. The two with ſtrain, and one with contuſion, recovered:—7 on the liſt. Our people caught fiſh; they alſo trucked for potatoes, pumpkins, and milk. We ſailed A M on our cruiſe.

2. The patient with fever, added the 30th ult. is recovered:—6 on the liſt.

3. Two complained of fever; one of them was taken ill ſeveral days ago:—8 on the liſt.

4. The man with ophthalmia is recovered:—7 on the liſt.

5. No alteration of the liſt.

6. One of thoſe who were added the 3d, is recovered; one added with fever:—7 on the liſt.

7. The other patient who was added on the 3d, is well; one complained of fever, and one of eruption:—8 on the liſt.

8. Two added with dyſentery, one with fever, and one with rheumatiſm:—12 on the liſt.

9. One complained laſt night of fever:—13 on the liſt.

10. One added with fever:—14 on the liſt. The fever is uncommonly obſtinate.

11. The two patients who complained the 7th, the one with rheumatiſm on the 8th, and the one added the 9th, are recovered; one complained of fever:—11 on the liſt.

12. Two added with fever, and one with contuſion:—14 on the liſt. P M we anchored at Halifax; the Pembroke arrived from England.

13. Three complained of fever, one of them was a wounded patient;—the marine, who was added the 6th with fever died. Soon after his deceaſe, many livid blotches appeared on him, particularly on the parts whereon he lay during his illneſs. The fever patients chiefly complain of their head; they are generally ſeized with rigours, followed, in ſome caſes, with vomiting and purging; and the purging, in ſome, continues. Others are ſeized with ſickneſs at ſtomach only, but ſome

with coſtiveneſs, which continues; all of them loathe their food, and moſt of them complain of univerſal and wandering pains:—15 on the liſt.

14. The contuſed patient of the 12th, is well:—14 on the liſt. The fever patients do not keep in bed in the day; they have very irregular remiſſions.

15. One marine added with fever:—15 on the liſt. It is not clear to me where we caught the infection, though, moſt probably, from the Lizard.—There was an armed brig at Hillſborough, St. John's, while the Lizard lay there, from which the ſurgeon of the Lizard thought they got their fever; we had communication with that brig.

16. One marine, and one ſeaman, complained of fever:—17 on the liſt.

17. The other lame patient added the 19th ult. the one on the 10th, one added the 12th, and one added the 13th, recovered; one ſeaman and one marine complained laſt night of fever; one marine added with piles:—16 on the liſt. The blood of one of the fever patients added yeſterday is ſizy.—The men were ſerved freſh beef.

18. No alteration of the liſt. The blood taken from a patient, *who was added the 8th*, was very little ſizy, and of a very looſe texture; the blood of the other patient taken ill yeſterday, was leſs ſo.

19. Two complained laſt night of fever, one of whom was lately ill of it; and two to-day, of fever: one of them was ſeized with bilious vomiting:—20 on the liſt. I applied to have the ſhip ſmoked with vinegar and gunpowder, which was done, and that ſhe might not be waſhed below during the winter. A M we ſailed with two ſloops under our convoy.

20. One of thoſe who were added the 13th, and two of them added yeſterday, recovered; one complained of fever, who had been ill four or five days:—18 on the liſt. Two of the patients had coughs, and two had fixed pains. Towards the end of the paroxyſm they complained chiefly of giddineſs, and of being light-headed, as they termed it. The blood of one of thoſe added to-day had a thin buff on it; and the craſſamentum, though looſe in its texture, bore too great a

proportion to the ſerum. Anchored at Le Have.

21. The two that were added with dyſentery on the 8th, had fever, and are well:—16 on the liſt. The happieſt effects have enſued from bliſters applied in the beginning of the fever, in many caſes; petechiæ appeared on ſeveral patients, and are moſt diſtinctly ſeen when they have a ſweat on them; their viſible duration uncertain. The captain bought milk for ſome of the patients.

22. The patient who complained of fever on the 11th, recovered; three complained laſt night of it:—18 on the liſt. Petechiæ very common among the patients. I applied to have the ſhip ſmoked for an hour only, and it was done. (See October 2.) The men bought potatoes and turnips, and catched fiſh.

23. A boy added with fever, complains of ſore throat:—19 on the liſt. Two of the fever patients have bad coughs; one added the 22d ult. with ſlow fever, is hectic: he had been a long time ailing. AM we ſailed; and PM we anchored again.

24. One added the 12th, one who complained the 18th, PM (see 19th), and one of those on the 21st, PM (see 22d) of fever, recovered. The first of these three was the patient with eruptions:—17 on the list.

25. The man who was added the 17th with piles, complained last night of fever. The marine added the 15th with fever, recovered:—16 on the list. One of the fever patients seized with piles. A number of pollock were caught by one of our boats crew.

26. The boy added with fever on the 23d recovered:—15 on the list. The convalescent fever patients relapse from very slight causes.

27. One of the patients added the 16th, recovered; two added with fever, one of whom was afflicted with it before. One complained of itch, a marine, and one of slight contusion; both capable of doing duty:—16 on the list.

28. Yesterday's relapsed patient recovered; one marine complained last night of fever; his principal complaint was violent pain in his stomach:—16 on the list.

29. Two patients, one a marine, complained last night, and three this morning, of

fever; the two ſeized laſt night complained much of their breaſts:—21 on the liſt. One added the 27th was delirious, his tongue black, and his voice altered; one complained of ſtrain, but does duty.

30. The marine added the 28th, and one of thoſe added yeſterday with fever, recovered; one complained laſt night of fever, who returned to duty the 20th, and one is added with contuſion:—21 on the liſt. The patient with ſlight contuſion of the 27th recovered; a number of the men have ſlight feveriſh ailments, who do not complain. PM we anchored at Coal Pits.

31. The two that complained the 28th, PM (ſee the 29th) recovered. The marine who was returned well the 25th, relapſed; one complained of fever, and the ſtrained patient of the 29th, added:—22 on the liſt, viz. ſixteen with fever, one conſumptive patient, the boy mentioned the 22d ult. the boy with the ſcurvy, one with eruption, one with contuſion, and one with ſtrain, beſides the itch patient. All the relapſed patients are very ill.

NOVEMBER.

1. Two marines, one added the 16th, and one the 17th, and one added the 27th ult. with fever, recovered; a boy complained of fever: 20 on the liſt. I applied, and had the ſhip well ſmoked twice, A M with vinegar and gunpowder, and P M with junk and tobacco fires, and with hot loggerheads quenched in tar. The ſhip was covered every where with a white powder, by the ſmoking of gunpowder, and ſmelt very ſtrong of ſulphur, as it did of tobacco by the ſecond ſmoking. Two of our boats were ſent up to Fort Cumberland.

2. The other patient added the 16th, the one on the 20th, one on the 29th ult. and the boy yeſterday, fever patients, with the ſtrained patient added on the 29th, are recovered; one complained laſt night of fever:—16 on the liſt, beſides the man with itch, and ſome with cough. The air was very agreeable laſt night to the men who lay in the tiers; upon every inſpiration I taſted the ſulphur. The boats returned, and brought a little freſh beef on board yeſterday for the captain and officers.

3. One who complained the 31ſt of fever, recovered; one complained laſt night, who had been ill four or five days of fever; purging was the moſt troubleſome ſymptom, with piles; his ſtools are porraceous. Several of the fever patients have looſe ſtools; a number of them have cough:---16 on the liſt. AM we ſailed.

4. Two complained laſt night of fever, one had purging, and had been ill a fortnight; the other was taken ill the 30th ult. and one complained of contuſion of his breaſt from fighting:—19 on the liſt.

5. The man who complained the 29th ult. and the two added yeſterday, with fever, recovered:---16 on the liſt. The contuſed patient of yeſterday was ſeized with fever. Off Annapolis,---we afterwards anchored in the Baſon.

6. The patient added the 2d with fever, recovered:---15 on the liſt. Fires were lighted in the hatchways. AM we ſent a boat up to town.

7. The patient who was added the 3d, recovered:---14 on the liſt, beſides the itch patient. AM we ſailed.

8. One complained of fever laſt night, who had been ailing a fortnight:—15 on the liſt.

9. No alteration of the ſick liſt. I applied to have fires lighted in the hatchways.

10. Fifteen ſtill on the liſt. We could not light fires in the hatchways. We anchored a little while.

11. The relapſed patient added the 30th, recovered; the man with itch complained of cough:—15 on the liſt. One complained of ſtrain, but does duty.

12. The patient taken ill the 30th ult. and added on the 4th, and returned the 5th to duty, relapſed on the 9th, but did not complain until laſt night of fever; one added with inflammation in his leg, who had the fever lately:—17 on the liſt. The fever patients are all better, except one, who is very bad. I got fires lighted in the hatchways.

13. The other patient added on the 8th ult. with fever, recovered; one complained of cold from lying on the booms in the barge, and one of ſlight wound:—18 on the liſt.

14. The patient added yeſterday with cold, recovered:—17 on the liſt, beſides the patient

afflicted with itch. Cruiſing off the Bay of Fundy.

15. A marine complained laſt night of fever; both this, and the relapſed patient added the 12th, caught the infection from a marine, recovering of fever; he had been very ill, and was removed from the ſick berth, back to his own, leſt, as he was very timid, the groans or appearance of the patients, in the ſick berth, might frighten him into a relapſe. The patient who was added the 8th, and the one on the 13th with wound, recovered:—16 on the liſt. The ſtrained patient who did duty, is now well. We could not get the ſhip ſmoked.

16. The patient added yeſterday to the liſt is very ill; one who had juſt recovered of ſtrain, got drunk, and complained again; another was added to the liſt ill of an inflammation:—18 on the liſt.

17. The man with piles, added the 25th with fever; one added the 22d (being ſent on board of a prize), and the yeſterday's ſtrained patient, were put off the liſt; one complained laſt night of fever, who was taken ill two days before: he caught it from the ſea-

men ſent on board the prize yeſterday; they were meſs-mates:—16 on the liſt. We could not get the ſhip ſmoked.

18. The patient added the 16th with tumour, recovered; one complained laſt night of ear-ach, and two of fever, AM:—18 on the liſt.

19. A boy complained laſt night of fever; he knew not how long he had been ill: a boy who lay cloſe to him was alſo ſeized with it; one was added with contuſion:—21 on the liſt.

20. The contuſed patient of the 4th, the one added the 18th with ear-ach, and yeſterday's contuſed patient, recovered. A marine complained of fever; he ſucceeded to a berth where two marines, who had had fever, formerly lay, one of whom died the 13th ult. One added with contuſion:—20 on the liſt. We fell in with the Lizard; the fever continued to rage on board of that ſhip; one man having died this cruiſe, and ſeveral before.—They waſh the ſhip, and ſmoke her afterwards for a little time. Eleven are on the ſick liſt, ill of fever, and ſeveral of the officers have been ſeized with it.

21. The

21. The two other patients of the 18th are well; the fever patient (diſmiſſed yeſterday) relapſed again by drinking; and one added with ulcer:—20 on the liſt.

22. A boy complained of fever, who was added to the liſt, making 21.—A M we anchored at Halifax.—The ſick quarters are ſo crowded, that, it is ſaid, there is no room for our people:—they are indeed ſhamefully bad quarters.

23. The contuſed patient of the 20th, and the other of yeſterday, are well; the itch patient, beſides having cough, is ſeized with fever; and one is added with wound:—20 bad, beſides my firſt mate, who had an attack of fever.—Got the ſhip, with the people's bedding, ſmoked.—The laſt ſupply of neceſſaries being (by means of our ſickneſs) expended almoſt ſix weeks ſooner than the allotted time, I applied for more, but the commiſſioner would not allow them.

24. One complained of contuſion:—21 on the liſt. The men were ſerved with freſh beef.—The ſhip and bedding ſmoked again.—My mate recovered.

25. A gentleman, who caught the fever from his mess-mate, was added to the list, making 22.—The fever patients are in a convalescent state; but two of them, in particular, are extremely weak.

26. My second mate was seized yesterday with fever; and a boy (who had been lying about without a hammacoe for two months past) complained of it:—24 on the list.—Eleven fever patients on recovery, eight of whom are marines; the consumptive patient, the one with diabetes (or the hectic patient); the boy with severe scurvy, and a marine with old eruptions from a venereal cause, in all 15, were sent to sick quarters. In a few days all the sick at quarters are to be removed to George Island, whereon a sort of hospital is to be fitted up, and to be attended by a surgeon, who had been appointed, by Admiral Shuldham, surgeon to an hospital ship.—Our ship was thoroughly cleaned, washed with hot vinegar, and afterward smoked with gunpowder, junk and tobacco, as before.—Every thing was got on deck, the sick taking all their clothes with them. After all this trouble, 60 supernumeraries were sent on board of us from

the

the Rainbow; eight of whom had fever, two had contuſion, one affected with ſcorbutic ſymptoms, and one with ulcer.

27. My mate is recovered. One complained of fever:—7 in the liſt, viz. three with fever, but not very ill, and four with complaints of lameneſs, beſides ſupernumeraries. Upon my repreſentation of the fatal conſequences to be apprehended to our ſhip's company from the fever among the ſupernumeraries, the captain applied to the ſenior officer in port, and got an order to ſend back the eight fever patients to the Rainbow: five of them complained of ſevere pain in their ſide or breaſt, with cough.—Theſe parts had been hurt by falls not long before, and by lying about on cheſts in the rainbow.—They had been ſent on board of her from the Pembroke, which they had cleared alongſide of the wharf, and uſed to go into town, get drunk, and lie in the ſtreets, and in infected houſes; but the ſurgeon of the Rainbow had no ſuſpicion of the infection being on board, and was ſurpriſed to hear it.—Her men were afterwards very ſickly, as I was informed.

28. One complained of rheumatiſm, to which he was ſubject, eſpecially in foggy weather:—8 on the liſt, beſides the four lame ſupernumeraries;—ſcrubbed all hammacoes.—PM we weighed, and anchored off Major's Beach.

29. The patient added on the 24th is well.—One complained of cough:—8 on the liſt. One ſupernumerary was added laſt night with contuſion; five of them are ill.

30. One complained laſt night of ſtrain, and another was added with rheumatic pains, and a third with fever, who meſſes with the patients added the 27th, making 11 on the ſick liſt: viz. four with fever, two with rheumatiſm, one with cough, three with ulcer, and one with ſtrain: beſides five ſupernumeraries, viz. one with ſcorbutic ſymptoms, three with contuſion, and one with ulcer. Could not get the ſhip ſmoked.

DECEMBER.

1. The patients added the 26th and 27th ult. and the two rheumatic patients, recovered:—7 in the liſt. The two contuſed ſupernumeraries of the 26th are recovered; three of

the others remain ill.—I could not get the ſhip ſmoked.

2. The boy added on the 26th, and another with cough, on the 29th ult. are well:—5 remain on the liſt. One ſupernumerary, who complained laſt night of fever, is recovered; three of them bad yet; one of them with ulcer, fractured his clavicle lately, and another has an old rupture.—Squally weather with ſnow.

3. The boy relapſed laſt night; he has an inguinal rupture of a conſiderable ſtanding, which he never mentioned before:—6 on the liſt. I got the ſhip ſmoked for a ſhort time.

4. A boy added with abſceſs:—7 on the liſt, beſides the three ſupernumeraries.

5. No alteration of the liſt. The ruptured ſupernumerary diſmiſſed.

6. One complained of fever; he had lately been expoſed a day and a night to rain, in aſſiſting to get off a tranſport that had run aground:—8 in the liſt. One ſupernumerary complained laſt night of fever; three of them ill. Sailed, A M, with the Amazon, Scarborough, and 34 tranſports, to New-York.

7. A marine, who attended the ſick before they went to quarters, complained of fever: 9 in the liſt, beſides the ſupernumeraries.

8. Laſt night three complained of fever; two of them relapſes. The boy added the 26th ult. is well:—11 in the liſt. The ſupernumerary who was added the 6th, is well; two complained laſt night of fever; four more are ill.—The fever patients complained much of chillineſs, and are dejected; the pulſe is neither very quick nor full; the tongue is whitiſh, and they have little thirſt; three of thoſe added laſt have had coughs, and one of them was at firſt ſeized with ſyncope.

9. A marine complained laſt night of fever; one added with wound, and another with old ſtrain:—14 in the ſick liſt. One of the ſupernumeraries added yeſterday, is well; one complained of fever, and one of rheumatiſm; 5 are now ill. A gale of wind.

10. The ſtrained patient added the 30th ult. he was rheumatic, is well. Laſt night one was added with fever, and another with contuſion:—15 in the liſt. A ſupernumerary (an old man) who had lately had cough, complained of fever; 6 ſupernumeraries are

ill. The gale continues. Loſt company of the Scarborough and many of the tranſports.

11. One complained of fever, who had it before, and one of fracture:—17 on the liſt.

12. One of thoſe added on the 8th, and another on the 18th, with fever, are well; one complained of fever, and two of contuſion:—18 on the liſt. The rheumatic ſupernumerary of the 9th is well. One (from meſſing with the gentleman who had the fever) was ſeized with it laſt night, and another A M: 7 ill.

13. The patient of the 6th, and one of thoſe (a marine) added he 8th, with fever, are well; one complained of fever:—17 on the ſick liſt. The fever ſupernumerary of the 9th is well; 6 of them ill. P M the Beverly brig, one of the convoy, made a ſignal of diſtreſs; being extremely leaky, the people were taken out of her, and ſent on board of different ſhips; an officer, with ſixteen ſoldiers, three women, and their children, were brought on board of us.

14. A marine complained laſt night of fever; and one added A M with contuſion:

—19 on the ſick liſt. One of the ſupernumeraries added the 8th, and one the 12th with fever, are well; four remain ſick. A gale of wind.

15. One of the contuſed patients of the 12th, and one of the 13th, are well; the marine returned well the 13th, complained of rheumatiſm:—18 in the ſick liſt. A gale of wind.

16. One of the patients with old ulcer, one added the 8th, with fever, another of the 10th, with contuſion, and the contuſed patient of the 14th, are well; one complained of fever:—15 on the liſt. Two ſupernumeraries added laſt night with fever, and another, A M, with ulcer: 7 of them are ill. One of the ſoldiers complained of ſcrophula. A gale of wind.

17. The boy added the 4th, and the marine the 7th, are well; one complained laſt night of fever, and one A M of ſtrain:—15 in the ſick liſt. The ſupernumeraries added yeſterday, are well; two more added with contuſion.

18. Two complained laſt night, and one A M of fever:—18 in the ſick liſt. One ſupernumerary

numerary returned well the 14th, complained of cough; 8 of them are ill, beſides the ſoldier. The Amazon parted company with us, taking one ſhip, that had money on board, under her convoy. A gale of wind.

19. The patient added the 12th, and one of the 17th, with fever, are well; one complained of rheumatiſm, to which he is ſubject, and another of contuſion:—18 ill. No other alteration. Very bad weather.

20. The fever patient of the 14th, and one with ſtrain of the 17th, are well; a marine, who ſome time before had been ill of fever, relapſed:—17 on the liſt. The moſt haraſſing ſymptom among the fever patients at preſent, is cough. The ſupernumerary added the 16th with ulcer, is recovered; 7 of them ill, beſides the ſoldier.

21. The patient of the 15th recovered; one who had been put in an infected berth, was ſeized with fever:—17 on the liſt; but no other alteration. By inquiry, I can very eaſily find by what means the patients contract infection. We have had very bad weather, inceſſant lightning, and a heavy ſea. The deck where the people lie is very wet, and

the air hot and disagreeable, from the hatches being battened down; numbers of the sick are wet in their hammacoes, from water running down upon them; and being so crowded with people, the sick berth is not only small, but in a bad place.

22. The rheumatic patient of the 19th is well; one complained of strain:—17 in the list. One supernumerary added with fever; 8 are ill, besides the soldier.

23. Two complained last night of fever: 19 on the list. I applied to have the ship smoked; but the decks were washed, and fires made afterwards between decks.

24. The patient added the 22d is recovered; a marine complained last night of fever, and another of habitual rheumatism:—20 in the sick list. One of the supernumeraries added with rheumatism; 9, besides the soldier, ill. Fires were lighted in the hatchways.

25. One added with habitual rheumatism:—21 on the list. The supernumerary, added the 22d, is well; one complained of cough and rheumatism, and one rheumatic patient was seized with fever; 9 are ill, besides the soldier. Fires were lighted in the hatchways.

26. The marine added the 23d is well; one added with abſceſs:—21 on the liſt. The ruptured ſupernumerary complained; 10 ill. —One ſoldier complained of abſceſs, and habitual flux; 2 ill. PM the other man, added on the 23d, died delirious of fever; he was remarkably dejected from his being firſt ſeized, and continued ſo. Very bad weather.

27. A marine, added the 28th, with fever, and the patient of the 25th, recovered; ſix complained of fever laſt night:—24 in the liſt, 14 of which are fever patients. Two of the rheumatic ſupernumeraries have fever. The ſick berth ſmelt offenſively, before it was ſmoked to-day.

28. The patient added the 21ſt is well; two (one of them a marine) complained laſt night of fever:—25 on the liſt, beſides the ſupernumeraries. Fires were lighted in the hatches, and the ſick berth ſmoked and cleaned.

29. One of the contuſed patients of the 12th, and the patient of the 26th, are recovered; one complained laſt night of fever:—24 in it. The ſupernumerary of the 18th recovered, and one complained of belly-ach; 10

ill, beſides the ſoldiers. The ſick berth was again cleaned and ſmoked.

30. The marine added the 24th, and two of the patients added the 27th, recovered; one complained of fever, another of rheumatiſm, and a third of inflammation:—24 in all. The ſupernumerary added yeſterday recovered, but PM he was ſeized with fever. No other alteration. The ſick berth was again cleaned and ſmoked.

31. One patient added the 18th, one the 27th, one the 29th, and another yeſterday, with fever, are recovered; a marine who lay between two fever patients, complained laſt night, and two this morning of fever:—23 in the liſt, viz. fourteen with fever, chiefly in a convaleſcent ſtate, two with rheumatiſm, one with fracture, one with ſtrain, one with contuſion, one with inflammation, one with wound, and two with foul ulcer. The ſupernumerary added yeſterday is well; nine remain ſick, viz. five with fever, two with rheumatiſm (one of whom does duty), one with rupture, one with contuſion, and one with ulcer. Two ſoldiers, one with ſcrophula, the other with habitual flux:—35 in all.

9 PM we arrived at Sandy-Hook. Lighted fires in the hatchways, and cleaned the ſick berth.

JANUARY, 1777.

1. Two (one, the marine with ſtrain) who complained laſt night, and two this morning of fever; two added with old cough:—28 in the liſt. Two ſupernumeraries added with fever, one with old cough, one with ſcurvy, and another with rheumatiſm; 14 ill. A paſſenger in the cabin, who caught the infection from Capt. Dalrymple's ſervants, complained of fever; 45 in all, including the two ſoldiers. Sailed up, and anchored off New-Yorke. Lord Howe commands in chief, and is very ill. Cleaned the ſick berth well.

2. Sent twelve fever patients, chiefly in a convaleſcent ſtate, to the hoſpital at Brooklyn, Long-Iſland; one added the 27th, and another of the 29th, with fever, are recovered; three complained of fever, one of them is a ſervant of the captain's, who had been ill before, and another has contuſion; 18 in the liſt. Three ſupernumeraries ſent to the hoſpital with fever; one added with contuſion,

13 ill, beſides the paſſenger and ſoldiers. Fires in the hatchways.

3. Sent four with fever, the patient with punctured wound, whoſe hand was inflamed, and another with bad ulcer, to the hoſpital:—12 on the ſick liſt. Three ſupernumeraries with fever, and the ſcorbutic patient, were ſent to the hoſpital; 9 ill beſides the paſſenger. The ſoldiers and women were landed; the ſhip well cleaned, waſhed with vinegar, and afterwards dried with fires.

4. Sent one of thoſe added the 2d with fever, to the hoſpital; a patient of the 31ſt ult. and another of the 1ſt, with fever, are well, as alſo the rheumatic patient of the 24th ult.—8 in the ſick liſt. Fires were lighted. Froſt.

5. My ſecond mate was again ſeized with fever laſt night:—9 on the liſt. Two ſupernumeraries complained, one of ſcald, the other of inflammation; 11 bad. Spruce beer ſerved to the ſhip's company.

6. One added with inflammation:—10 on the liſt. Three ſupernumeraries added with fever; 14 bad.

7. One

7. One added with rheumatiſm, 11 on the liſt. The ſupernumerary added the 5th, with inflammation, recovered; 13 ill.

8. The patient of the 30th ult. with inflammation, recovered:—10 on the liſt. The paſſenger is well; but no other alteration.—I am informed that the phyſician of the hoſpital thinks there is nothing the matter with our fever patients. It is true moſt of them ſent the firſt day were in a convaleſcent ſtate.

9. The patient with fracture, added the 11th ult. one of thoſe with cough on the 1ſt, and my mate, are recovered. Sent the boy with rupture to the hoſpital:—6 in the liſt.

10. The other man, added the 1ſt inſt. with cough, and one the 6th, are well; a marine, who had fever twice before, was ſeized laſt night with it, and one this morning:—6 in the liſt. Sent ſix of the ſupernumeraries to the hoſpital; two with rheumatiſm, one with cough, one with fever and rupture, one with ulcer, and one with contuſion. Two ſupernumeraries complained of fever; 9 of them are now ill. Two of them have ſcurvy, though one of them does duty.

The thermometer being placed on deck, ſtood at 25.

11. One of yeſterday's patients recovered; one complained of ſore throat, and one of contuſion:—7 ill. Two of the ſupernumeraries added the 6th, do duty; one is added with ſcorbutic lumbago; eight of them ill, one of whom has ſcurvy. Sent the marine, who was added yeſterday, to the hoſpital.

12. Two complained of nephritic ſymptoms: eight on the liſt, beſides the ſupernumeraries.—Many of the men get drunk every day with New-England rum.

13. Yeſterday's patients recovered; three ſeized with fever; ſwelling about the glands of the face and throat, but they complain chiefly of their heads, and deafneſs; three added with cough, and one with dyſenteric ſymptoms:—13 on the liſt. One of the contuſed ſupernumeraries, added the 17th ult. and has ſince been ſeized with rheumatiſm, is recovered; one complained of fever, one of cough, and one is relapſed to ſcurvy; ten of them are ill.

14. One of the patients added yeſterday, died of his fever at 3 AM: how long he had been

been ill before he complained, I know not; the other two were ſent to the hoſpital; one complained of contuſion:—11 in the ſick liſt. One of the ſupernumeraries added the 6th, one the 10th with fever, one the 11th, and yeſterday's fever patient, are recovered; ſix of them remain ill. The Flora arrived from Halifax; three of the men we ſent to ſick quarters, came in her,—the boy who was ſo ill of the ſcurvy, and two others. The gentleman and two of the men, who were put on board one of our prizes, were loſt by the prize being run aſhore near the light-houſe, Halifax; the other two were ſaved, and came in the Flora. Some more of our men, who were on board of another prize, alſo came in her. Our ſhip was haled along-ſide of a wharf, and moored out of the ſtream of ice.

15. The contuſed patient of the 11th, and one added the 13th with cough, recovered; two added with fever (one of whom came in the Flora), one with contuſion, and the ſcorbutic boy with weakneſs:—16 in the liſt; three of the ſupernumeraries who were ill have entered for the ſhip. One ſupernu-

merary complained of cough; four of them now ill.

16. The patient added the 2d with contuſion, and the other with dyſenteric ſymptoms, are recovered; one complained of ſuppreſſion of urine, and two more of the ailing ſupernumeraries entered for the ſhip:—17 in the liſt. One ſupernumerary recovered, and one remains ill.

17. The rheumatic patient of the 30th ult. and the fever patient of the 15th, who came from the Flora, recovered; one complained of fever, and one of rheumatiſm, who had it lately:—17 on the liſt The contuſed patient added the 14th, is ill of fever.—No other alteration.

18. Sent the patient added the 16th, and one yeſterday with fever, to the hoſpital; alſo one ſcorbutic patient, formerly a ſupernumerary, was ſent to the hoſpital ſhip; one complained of cough:—15 in the liſt. Sent the ſcorbutic ſupernumerary to the hoſpital ſhip; one complained of cough. Very cold.

19. Sent two patients to the hoſpital with ſevere fever; viz. a ſupernumerary added on

the 10th, but ſince entered for the ſhip, and one with contuſion; a fever patient of the 15th is recovered:—12 remain on the liſt. No other alteration. Smoked the ſhip.

20. The carpenter added with fever, and another with ſcorbutic ſymptoms:—14 on the liſt. One of the patients added the 13th with cough, is ſeized with fever. No other alteration. Smoked the ſhip.

21. Sent three with fever to the hoſpital; one of them was added the 13th with cough, another on the 18th, and one, lately entered, who complained laſt night. The patient of the 11th, with ſore throat, and the ſupernumerary of the 15th with cough, are recovered. The patient ſent the third to the hoſpital, with inflammation, was ſent back laſt night for irregularity:—11 on the ſick liſt. The ſhip was waſhed, againſt my inclination, but though fires were lighted afterwards between decks, they cannot dry the ſhip thoroughly. 9 PM there was an alarm of fire aſhore, but it was ſoon extinguiſhed. When the thermometer was at 52, there was a fire in the gun-room.

22. Three who were returned from the hoſpital on the 20th, are again added with fever, and two other men complained:—16 in the liſt. The ſupernumerary is recovered. The diſtinction between the ſhip's company and ſupernumeraries will be no longer obſerved. Fires were lighted in the hatchways, and ſome *ſp. ſalis* evaporated between decks*. The ſhip's company employed in waſhing their clothes.

23. The ſcalded patient of the 5th is well; and the ſcorbutic patient of the 20th is ſent to the hoſpital-ſhip; one complained of cough, and a drunken fellow of fever:—16 in the liſt. The men employed as yeſterday; lighted fires.

24. Yeſterday's fever patient is well; one who lately had cough, complained of fever:—16 in the liſt. A very dirty bad day.

25. Two complained laſt night of fever, one of whom had cough:—18 in the liſt.

26. The patient added the 23d with cough, does duty; one added with cough, and one with fever:—19 in the liſt.

* This was recommended by Mr. Chaloner, ſurgeon of the Commander in Chief's ſhip.

27. One

27. One rheumatic patient, who returned from the hoſpital, was added to the liſt; 20 in the whole. Laſt night there was a falſe alarm of fire on ſhore.

28. The one added on the 24th with fever, is recovered, but has ſcalded his wriſt; one complained of excoriation:—21 in the liſt.

29. A patient who returned from the hoſpital on the 20th, and complained the 22d, of fever, and one of his meſſmates who was infected by him, and complained on the 25th, were ſent to the hoſpital; I believe both of them have been irregular; the patient added the 26th was alſo ſent to the hoſpital. One added the 15th with contuſion, and yeſterday's ſcalded patient, are recovered; one added with indigeſtion, one with inflammation, and one complained of chilblains:—18 in the liſt.

30. The carpenter, who was added the 20th, recovered; one complained of contuſion, and one of head-ach, who is not on the liſt:—18 in it.

31. The patient added the 26th with cough, had the fever, and is diſcharged; one added with fever:—18 in the liſt; viz. four with

fever, three with rheumatiſm, one with ſcurvy, (ſeized with indigeſtion); two with inflammation; three with contuſion, one with furuncle, one with excoriation, one with chilblains, one with ulcer, and one weak patient, beſides one with head-ache.—The ſhip was haled into the ſtream, and 54 priſoners were ſent on board of us from a priſon ſhip.

FEBRUARY.

1. Three marines, (one of them with inflammation) and one ſeaman who attended the ſick, complained laſt night of fever; the contuſed patient of the 30th is diſcharged, and the other patient of the 30th is recovered; one complained of fever:—21 in the liſt.

2. The contuſed patient of the 2d ult. had the fever, and is recovered; and the marine with inflammation, added yeſterday with fever, is recovered, as alſo the one with chilblains; one of our men died at the hoſpital laſt night, he was ſent there the 29th; one of his meſſmates, upon hearing it, complained of fever; four returned from the hoſpital laſt night, one of them added to the liſt, who is very weak, and not free of fever; one yeſterday, with old rheumatiſm:—22 in the liſt.

—Sailed and anchored PM near Hell-gates, that is between the Continent and Long Iſland.

3. The patient with inflammation, of the 21ſt; one with inflammation, of the 29th ult. one of the marines added the 1ſt, and yeſterday's frightened patient, recovered; one complained of relapſe of fever, and another of cough, who was at the hoſpital:—20 in the liſt. Sailed through Hell-gates.

4. Two marines complained of cough; one of rheumatiſm, one of ſtrain, and one of ulcer:—25 in the liſt. PM we anchored off Gardener's Iſland.

5. The frightened patient relapſed again laſt night; the officer of marines, and the gunner added with fever, and one with ſcurvy:—29 in the liſt. PM we anchored at Rhode Iſland. Sir Peter Parker commands.

6. One of thoſe added the 22d ult. and the ſeaman of the 1ſt, with fever, are recovered, as alſo one added the 4th with ſtrain; five complained laſt night of fever; one is the officer of marines' ſon, who got it by ſleeping with his father; and another of them caught it from a ſick meſſmate:—31 in the liſt. The patient added the 29th ult. with indigeſtion is very ill of ſcurvy; a ſingular caſe. The

ſpruce

ſpruce beer is out—ſerved grog to the ſhip's company.

7. One added the 30th ult. and one of thoſe yeſterday, are recovered of fever; two complained laſt night of fever:—31 are on the liſt.

8. The other marine, added on the 1ſt with fever, one added the 4th with rheumatiſm, the frightened patient of the 5th, and two of thoſe added the 6th, are recovered; one added with ſcald, and another with contuſion:—28 in the liſt. All the priſoners, except nine of them who were Engliſh and Iriſh, were ſent on board a cartel, and ſix of thoſe are very ill of the ſcurvy.

9. One of the hoſpital patients, added the 22d ult. one the 3d with cough, one the 4th, and one on the 6th, are recovered; two complained of fever, and one of belly-ache; the ſix men added with ſcurvy. P M ſent one man who was very ill of ſcurvy, and two of the remaining ſix to ſick quarters:—30 in the liſt.

10. The patient of the 27th ult. and one added the 6th, are recovered; two added with fever, one of whom had it twice before, and relapſed laſt night, the other is a marine:—

30 in the liſt. A pretence is made, whence it originates I know not, that more of our ſick cannot be accommodated at ſick quarters aſhore, though in fact they are not half full. Very bad weather.

11. Two added with fever laſt night, one of them a marine, who has had it four times; and one added this morning with fever; one with ſcurvy, and one with rupture:—35 in the liſt, five of whom, marines, got cold by lying under the half-deck while the priſoners were on board. P M I was obliged to remove my thermometer to my cabin; an exceeding ſtormy day. A goat, which will make four dinners, was killed for the ſick.

12. The gunner added the 4th, one added the 9th, and one of yeſterday, (all fever patients) and yeſterday's patient with rupture, are recovered; three added with fever, one of whom is often ill, and one with rheumatiſm; —35 in the liſt.

13. One added the 13th ult. with fever, who had alſo an obſtinate ſwelling on the left ſide of his head, one of the 9th, one of the 11th, and one of yeſterday, all fever patients, recovered; one added with fever, one with nephritic ſymptoms, and a third with habitual rheumatiſm:—

rheumatiſm:—34 on the liſt. We ſailed on a cruiſe.

14. The one added the 10th with fever, is recovered; five added with fever, three of whom have cough:—38 in the liſt. The ſick-berth changed from a-midſhips to the ſtarboard ſide of the main hatchway; it is cleaned and ſmoked as often as the weather permits.—The ſtarboard bay, where the priſoners were confined, though it has been well cleaned, and ſmoked with gunpowder, ſtill retains a very diſagreeable ſmell.

15. One of thoſe added the 12th, is well; one complained of contuſion and fever laſt night; the man who had excoriations is ſeized with the fever:—38 in the liſt. P M we anchored at Block Iſland.

16. The patient with nephritic ſymptoms, added the 13th, is well; two added with cough:—37 in the liſt. We ſailed again.

17. The patient added on the 10th of Nov. with ulcer, and one of the fever patients added the 12th, are well; twoadded with relapſe of fever (one a marine):—37 in the liſt. —The captain gave a ſheep to the ſick.

18. The patient added the 7th, and one the 16th, recovered; one added with froſt-bit toes,

and an old rheumatic patient with fever:—37 ill. The ſick-berth cleaned as often as the weather will permit.

19. One of the marines added the 4th, one the 5th, and another the 11th with ſcurvy, and one the 17th, are recovered; ſix added with fever:——39 in the liſt. We got ſome oranges and limes out of a prize ſloop from Hiſpaniola, for the uſe of the ſick.

20. The other marine added the 4th, and one of yeſterday's patients, are recovered; three added with cough and ſore throat, and one with ſcald:—41 in the ſick liſt. PM very cold; anchored at Block Iſland.

21. Two of the fever patients added the 14th, one of them a marine, the other marine added the 17th, and one of them added yeſterday, are recovered. The patient with ulcer, who recovered the 17th, cut his leg again by getting drunk yeſterday, and has now a bad ulcer; one complained of ſcorbutic ſymptoms, and another of excoriation:—40 in the liſt. Laſt night was by much the coldeſt we have had during the winter; in my cabin, in the cock-pit, the thermometer was 26. This morning we ſailed.

22. The patient added the third, the ſcalded patient

patient on the 18th, the marine on the 10th, one on the 2d with rheumatiſm, one of thoſe on the 16th, one of the 19th, and two with cough, of the 20th, are recovered; two complained of fever:—34 in the liſt.

23. One added the 14th, and one of yeſterday's fever patients, recovered; three (one of them a boy) complained laſt night of fever; one added with contuſion, and one with excoriation:—37 in the liſt. One ſeized with feveriſh ſymptoms laſt night, recovered.

24. The other patient added the 22d, is recovered; two with fever, of whom one had ſeveral relapſes, added to the liſt:—38 in the liſt, beſides ſome with cold, who do duty.—Bad weather.

25. The patients added the 21ſt, and one of the fever patients on the 23d, are well: one complained of belly-ache, one of rheumatiſm, and two of contuſion:—39 in the liſt, and a number ailing who do duty.

26. One with contuſion, and another with excoriation, added the 23d, and one of yeſterday's contuſed patients, are recovered; four complained of fever, and one of contuſion:—41 in the ſick liſt. The ſhip was cleaned. PM one of them added the 19th, died of

fever: he is the 4th who has died of it. We ſpoke with the Orpheus, and her prize. I hear they have ſeventy on their ſick liſt, chiefly with fever, which they caught, it ſeems, from ſome priſoners whom they had on board. I have ſince been told by the ſurgeon, that they loſt twelve or thirteen on board, and a good many at ſick quarters, by this fever. He did not uſe the bark.

27. One of the 17th ult. with rheumatiſm, one added the 9th, the frequently-ailing marine of the 11th, one of the 24th, a contuſed patient of the 25th, and one of yeſterday's fever patients are recovered; one complained of fever, whoſe meſſmate had it lately, one of furuncle, and one of ſcald:—38 in the liſt. Fires were lighted in the hatchways.

28. The patient added the 9th with the belly-ache, one of thoſe added the 19th, and one the 26th, with contuſion, are recovered; two added with fever, and one with inflamed arm:—38 in all;—viz. ſixteen with fever, ſeven with ſcurvy, three with rheumatiſm, one with bad cough, one with belly-ache, one with ear-ache, one froſt-bit, one with excoriation, one wounded, one with inflammation, and two with furuncle.

MARCH.

MARCH.

1. One of thoſe added the 19th, one with belly-ache the 25th, and one with fever the 26th ult. are recovered; four complained of fever, (one of them a relapſed patient) and two of rheumatiſm, who are ſubject to it;—41 in the liſt.

2. One who had furuncle, and was ſeized the 1ſt ult. with fever, is recovered; one complained of fever:—41 in the liſt. One of the ſcorbutic patients, who was a priſoner, has ſevere froſt-bit toes, but did not complain of them before.

3. One of the marines added the 4th, one of the fever patients the 26th, the two furuncle patients, and two fever patients added the 1ſt, are recovered; one complained laſt night of fever, one of diabetes, one of contuſion, and one of ulcer:—39 in the liſt. We ſpoke with the Orpheus, whoſe people are ſtill very ſickly.

4. The patient added the 2d, who came from the hoſpital, and one with inflammation, the 28th ult. are recovered; three complained of fever, one of ſcorbutic ſymptoms, and one of the furuncle patients, who returned to duty yeſterday,

yeſterday, is relapſed:—42 in the liſt. P M anchored at Block Iſland.

5. One of thoſe added the 22d of January, who had been at the hoſpital, and has had ſeveral relapſes ſince; one added the ſecond, one with diabetes the third, and one of thoſe added yeſterday with fever, recovered; one complained of fever:—39 in the liſt. P M the Orpheus went into Rhode Iſland. The inhabitants brought off a little freſh ſtock, potatoes, beet roots, and eggs.

6. One of the patients added the 19th ult. and one of yeſterday's, are recovered; one complained of inflammation:—38 in the liſt. P M we ſtood towards Block Iſland to get a bullock, ſome fowls and potatoes. Every thing very dear.

7. One who meſſes with two fever patients was ſeized with it, and one complained of contuſed knee:—40 in the liſt. The Captain ordered freſh broth for fifteen of the worſt of the ſick people, who could uſe it; and the purſer ſerved a number of the ſick with freſh beef in lieu of grog, which I had ſtopped.

8. One of the ſcorbutic patients added the 9th, one of the fever patients the 28th ult. one the 4th, and the furuncle patient are recovered:

covered; five complained of fever:—41 in the liſt. The Captain ordered broth for the ſick.

9. One of the ſcorbutic patients added Jan. 18, with fever, the three rheumatic patients (one of Jan. 26, and the other two of the 1ſt inſt.), one of thoſe added the 5th, the other the 27th ult. with fever, one of the fever patients of the 1ſt, and one of the 4th, are recovered; one complained of bad cough, and one of fever who has been ill five days, and came out of the prize Weſt India ſloop:—35 in the liſt.

10. One of the ſcorbutic patients of the 9th, one added the 22d with fever, one the 27th ult. with ſcald, and one the 3d with contuſion, recovered; one complained laſt night of fever, and another of ſcorbutic ſwelled ancle to which he is ſubject:—33 on the liſt.

11. The patient added the 1ſt, and one the 8th with fever, and one of the 9th with bad cough, are recovered; one complained of fever, one with giddineſs, and one with ear-ache:—33 in the liſt.

12. A marine who has been frequently ill before, and was added the 24th ult. with fever, the fever patient of the 7th, and yeſterday's patient with giddineſs, are recovered; one complained laſt night of fever:—31 in the liſt.

liſt. P M the priſoner added the 9th died of his fever in a violent delirium; he had been ill of fever before on board the ſloop, and was five days ill before he complained to me. This is the 5th patient who has died of fever; petechiæ are very common among the fever patients.

13. The patient added the 6th, the ſcorbutic one the 10th, and one with ear-ache the 11th, are recovered; a marine added with foul ulcer:—28 on the liſt.

14. A patient of the 14th ult. who has been ſcorbutic ſince he recovered of fever, and one added the 8th, are well; one complained laſt night of fever, one had return of bad cough, and another, ſubject to rheumatiſm, is added with ſcurvy:—19 in the liſt, beſides two froſt-bit and one ulcered, (priſoners) brought out of a prize; a quantity of onions were brought from the prize, and ſerved out to all the ſhip's company. P M we anchored at Rhode Iſland, and ſent 7 men to ſick quarters, viz. one with bad cough, one old rheumatic patient, three ſcorbutic, one of whom was froſt-bitten, a boy added the 8th with fever, and the patient with excoriations.

15. The patient added the 12th is recovered; one complained of fever, he attends the ſick, and is frequently infected:—22 in the liſt.—The priſoners were ſent on board the Chatham.

16. The fever patient of the 11th recovered; one added with fever who lately came from ſick quarters, and had been ſent there from one of the prizes, ill of fever:—22 in the liſt. The Greyhound and Orpheus went up the river.

17. The rheumatic patient added the 25th ult. and one the 15th, from attending the ſick, recovered; two complained of fever:—22 in the liſt. We ſailed in company with the Lark, and anchored P M at Block Iſland.

18. One added the 19th ult. and one of yeſterday's patients are recovered:—20 in the liſt. A M we ſailed, and P M we run a ſloop aſhore; the Lark ſtood in pretty near to her afterwards, and we followed, both firing a conſiderable time at her and at two guns, from whence the rebels fired at us, without hurting either of our ſhips; but one of our men, by ramming home a wad and cartridge without the gun being ſpunged, had both his hands blown off, his arms broke and much lacerated

lacerated, and his face greatly burnt by the cartridge taking fire. Both arms were neceſſarily amputated above the elbows. The fever patient of the 14th died PM: he was addicted to drinking. He is the 6th who died of fever.

19. The froſt-bit patient added the 14th, and one of the fever patients of the 28th ult. recovered; one complained yeſterday of headache, and another this morning of fever:—20 in the liſt. The ſick-berth is cleaned and ſmoked every good day.—We anchored off Plum Iſland.

20. One complained of rheumatiſm, two of ſcurvy, and one of ear-ache:—24 in the liſt. We anchored AM at Shelter Iſland.

21. One complained laſt night of fever:—25 in the liſt. Employed wooding and watering the ſhip. No ſtock to be got worthy of notice.

22. The fever patient of the 7th, one of the 8th, one of the 17th, two of the 19th, one with rheumatiſm, and another with ear-ache, of the 20th, are recovered; two complained of fever, one of bad cough:—21 in the ſick liſt.

23. The wounded patient died this morn-

ing of his wounds, and one of the ſcorbutic patients of the 20th recovered; one complained laſt night of fever:—20 in the liſt.

24. One added the 14th ult. and one of the fever patients of the 22d, recovered; a black complained of fever laſt night, and another man this morning, and one of contuſion, making 21 in the liſt.

25. One complained laſt night of fever:—22 on the liſt, five of them with very bad fever. The contuſed patient of the 25th is well.

26. Two were added with indigeſtion, from eating raw *clams* or *hens* unwaſhed*, laſt night; ſeveral others complained from the ſame cauſe, who were not added to the liſt, and were all relieved by vomits:—23 in the ſick liſt. Twenty-nine Americans made their eſcape in a ſmall boat from Connecticut, and came on board of us, to be ſent to New York to enter as volunteers in one of the Royal American corps. After getting ſome victuals and drink, they were ſent aſhore to one of our foraging parties at Long Iſland. The Captain and the officers gave the ſick two ſheep.

* A ſpecies of Shell Fiſh.

27. The

27. The patients added yeſterday are well; —one added with fever, who had it very ſeverely before, and one with excoriation, making 23 on the liſt. A M ſailed, and P M arrived at Rhode Iſland.

28. One added the 26th ult. one of the 21ſt, another of the 22d, and two of the 24th, were ſent to ſick quarters with violent fever: —18 in the liſt.

29. The patient of the 27th with fever, is well:—17 in the liſt.

30. One complained of froſt-bit toes:—18 in the liſt. Sailed about ſix or ſeven miles up the harbour betweeen Rhode Iſland and Prudence, to relieve the Centurion.

31. The patient added the 16th is recovered; one complained of a ſcorbutic ſwelled leg, making 18 on the liſt. P M a ſick ſupernumerary was ſent with the reſt of them on board the Centurion. The 17 ſick are, ſix with fever, four with ſcurvy, one with bad cough, one with froſt-bit toes, one with ſcald, one with excoriation, and three with ulcer. Our boat rows guard in the night.

APRIL.

1. The patient with cough, and another with

with excoriation, are recovered; yesterday's recovered patient is relapsed, and two others added with fever relapses:—18 in the list.

2. The fever patient of the 23d, and one with frost-bit toes of the 30th ult. are recovered:—16 in the list. We began to dig a garden yesterday on the island of Prudence, and to sow some seeds. No inhabitants on it.

3. The patient added the 8th of February with contusion, and seized the 11th ult. with fever, and one of those added the 1st, are recovered; a marine complained of relapse of fever last night:—15 in the list. One of our men sent from a prize to sick quarters with fever. The Centurion sailed down to Newport.

4. One of the ulcer patients, who was added the 21st ult. with wound, another of the 1st, and yesterday's patient, are recovered; one added to the list with fever:—13 in all.

5. The man added the 20th of Feb. with scald, is recovered:—12 in the list.

6. Two (one of them a marine) complained of fever, both of whom had it before:—14 in the list. The convalescents were sent ashore to walk, and the ship was washed.

7. No alteration of the ſick liſt. I wanted to have a tent erected on ſhore for the ſick, but the captain would not conſent to it. He allows the convaleſcents to go aſhore to walk when the weather permits. Their mutton is all expended. They have portable ſoup with onions.

8. One of the patients added the 6th is recovered; three added with fever, and one with inflammation:—17 in the ſick liſt.

9. One of the ſcorbutic patients of the 20th, another of the 25th ult. and one of yeſterday's fever patients, are recovered; one added with inflammation, from cutting his nail too cloſe:—15 in the liſt.

10. Two complained of fever, one of bad cough, and one with lethargic ſymptoms:—19 in the liſt.—A very wet fog.

11. The marine added the 13th ult. and the relapſed patient of the firſt (formerly a ſupernumerary), are recovered; one who lately had the fever, is relapſed, and another with ſore throat added, making 19 in the liſt. Some portable ſoup ſent on board for the ſhip's company. I adviſed 4lb. of it to be diſſolved every banian-day in the peaſe-ſoup.

12. The fever patients of the 8th, another

fever, and the lethargic patient of the 10th, and yesterday's fever patient, are recovered :— 15 in the list. The patient added the 10th with cough, is seized with fever. The people like their pease with the soup.

13. One patient of the 6th, a fever patient of the 8th, and two others of the 10th, recovered :—12 in the list.

14. One complained last night of fever, one of head-ache, and one of inflammation :—15 in the list. One of the scorbutic patients seized with fever.

15. The patient of the 11th, with sore throat, is well ; one complained last night of fever :—15 in the list. I hear the men on board of other ships will not eat their pease with the soup. I suppose too much of it is boiled in them.

16. The patient added the 10th ult. and one of the 14th, with head-ache, are recovered ; one complained of relapse of fever, and another of scorbutic symptoms :—15 on the list.

17. One added the 2d, and one the 31st, ult. and yesterday's fever patient, are recovered ; one complained of fever and inflammation :—13 in the sick list.

 18. A boy

18. A boy complained of fever laſt night, one of ſore throat, and one of ſlight wound: —16 in the liſt.

19. No alteration of the liſt. The patient of the 15th is very ill.

20. The one added the 10th with bad cough, and one of the 18th with ſlight wound, recovered:—14 on the liſt.

21. No alteration.

22. The patient added on the 9th is well:—13 on the liſt.

23. One complained of ſcorbutic ſymptoms laſt night:—14 in the liſt.

24. Two added with fever:—16 in the liſt. One of the patients added this day, has been ailing ſince he came from New-York hoſpital. P M the patient added the 15th died of fever. This is the 7th who has died of fever.

25. One of the 17th is well; one complained of ſcorbutic ſymptoms:—15 in the liſt.

26. One complained of contuſed wound, and another of inflamed finger:—17 in the liſt.

27. The fever patient of the 4th, and one

the 23d, are recovered; two added with fever:—17 in the list.

28. No alteration.

29. Seventeen in the list. I am informed that two more of our people were sent with fever, from the prize to sick quarters.

30. Two fever patients sent to sick quarters. The patient added the 25th, is well; one of the scorbutic men (a Black, an irregular fellow) returned from sick quarters as bad as when he went, and is added to the list:—15 in it, viz. five with fever, four with scurvy, one with sore throat, three with inflammation from different causes, one with contused wound, and one with ulcer.

MAY.

1. The boy with scurvy, added the 2d of August ult. and was since in sick quarters at Halifax, the boy with ulcer of the 3d, one with fever on the 8th of March, one with inflammation on the 8th, and one the 27th ult. are recovered; two complained of fever, one of whom had it lately, and one of rheumatism:—13 in the list. Last night the gentleman

who had charge of the prize went to ſick quarters, and died this day of his fever *.

2. No alteration.

3. Thirteen ſtill in the liſt.

4. Two (one a marine) added to the liſt with fever:—15 in it.

5. One of thoſe added the 6th, and another the 24th ult. are well; one complained of abſceſs:—14 in the liſt.

6. One added the 16th with ſcorbutic ſymptoms, and one the 18th ult. with ſore throat, are recovered:—12 in the liſt.

7. One added the 1ſt, with fever, is well; one added with fever and inflammation:—12 in the liſt.

8. No alteration.

9. The patient of the 5th is recovered:—11 in the liſt.

10. The boy added the 8th ult. though pretty well recovered, has relapſed, and is ſent to ſick quarters; one is added with relapſe of fever:—11 in the liſt.

11. One complained of fever:—12 in the liſt.

* I never ſaw him during his illneſs, nor did my mates.

12. Two

12. Two added with fever, one of whom has had ſeveral relapſes:—14 in the liſt.

13. The patient added the 11th, the two yeſterday, and the Black with ſcurvy, were ſent to ſick quarters:—10 in the liſt.

14. The other fever patient of the 1ſt is well; one complained of contuſion:—10 in the liſt.

15. A man who lay cloſe to the ſick berth, complained of fever, and was added:—11 in the liſt.

16. The other patient of the 27th ult. and one of the 14th, are recovered:—9 on the liſt.

17. The patient added the 10th is well:—8 in the liſt. The ſhip is moved more than a mile farther up.

18. The rheumatic patient of the 1ſt is recovered; another added with fever:—8 in the liſt.

19. No alteration in the liſt.——I applied to the captain to cauſe oxylapathum, dandelion, tops of wild peaſe, &c. to be gathered, and boiled every banian-day among the ſhip's company's peaſe.

20. One complained of fever:—9 in the liſt. Plenty of mint, muſtard, ſorrel, and

lamb's quarters (as it is vulgarly called), to be gathered aſhore, which are well cleaned, and boiled with the peaſe.

21. One complained of belly-ache, and one of tooth-ache:—11 in the liſt.

22. One complained of a very bad ulcer in his leg:—12 in the liſt. The men are very fond of their peaſe with the ſoup and vegetables among them.

23. The marine fever patient of the 4th, ſent to ſick quarters, and one of the 21ſt, are recovered:—9 in the liſt. Theſe two days paſt the NW wind has burnt and withered every thing aſhore amazingly. A hot day.

24. The patient of the 26th ult. of inflammation, is recovered:—8 in the liſt. Some four croute ſent on board for the ſhip's company; half a pound of which is to be ſerved to each man, to eat with their ſalt beef on Tueſdays and Saturdays while it laſts.

25. One complained of inflamed foot:—9 in the liſt.

26. Four with fever (two of whom, one a boy, had it before) added to the liſt:—13 in it.—They have all different ſymptoms who were added to-day.

27. One of the 15th recovered; another had a relapse of fever;—13 on the list.

28. The patient of the 20th, one of the 25th, another of the 26th, and one added yesterday, are recovered; one complained of sore throat who had it lately, and of furuncles:—10 in the list. The northerly winds have done much mischief to the fruit-trees, &c. on shore.

29. No alteration of the list. At noon, being relieved by the Diamond, we dropped down the harbour, and anchored.

30. The patient added the 14th ult. with inflammation, and one of the 18th, are recovered:—8 on the list.

31. One of those added the 26th is well:—7 on the list, viz. three with fever, one with wound, and two with ulcer.———Anchored at New-Port. Some porter sent on board for the sick, from the agent victualler. Eight of our men brought on board from sick quarters.

JUNE.

1. The patient with wound, added the 26th of April, one added the 4th, and another the 26th ult. recovered; the patient with sore throat,

throat, discharged; one complained of whitloe:—4 in the list.

2. Two of the eight who came from the hospital the 31st ult. are added to the sick list with scorbutic symptoms:——6 in it. Those who have had fever of late, have been seized with scorbutic symptoms, in their convalescent state. P M we sailed in company with the Amazon and Orpheus on a cruize, and the three ships' companies agreed *viva voce* to share prize-money.

3. One complained last night of fever:—7 in the list. A very wet fog.

4. The patient added the 26th ult. is recovered; two added last night with fever:—8 in the list.

5. The patient added the 7th, another of the 22d ult. and one the 1st, are recovered:—5 in the list.

6. The patient of the 4th is recovered; two, one of whom came from a prize, complained last night of fever:—6 in the list.

7. One of the patients added the 2d, and one of the 4th, are recovered; one complained last night of hæmorrhage from the nose;——5 in the list.

8. The patient of the third, and one of the

5th recovered; one added with fever laſt night, who came from ſick quarters the 30th ult.—4 in the liſt.

9. One added laſt night with contuſion:—5 in the liſt. Caught a few fiſh.

10. The patient added the 8th, recovered; one complained of fever——5 in the liſt.—Caught ſome fiſh. Very wet fogs.

11. The hæmorrhage patient of the 7th is recovered:—4 in the ſick liſt. We caught a few fiſh.

12. The patient of the 9th is well; one with wound, one with contuſion laſt night, and one with ſcorbutic blotches, who was formerly very ill of ſcurvy, and ſent to ſick quarters, added to the liſt:—6 in it.

13. One added with wound, and a boy with relapſe of fever:—8 in the liſt. Very wet fogs.

14. One complained of ſtrain:—9 in the liſt.

15. Laſt night a patient was ſeized with epilepſy, who is ſubject to it; another was added with fever:—11 in the liſt. We caught a few cod.

16. The other patient of the 6th, one of the 10th, the wounded patient of the 13th, and

and yeſterday's fever patient, recovered; a boy, who came from ſick quarters the 13th ult. relapſed with fever; one complained of indigeſtion, from eating fiſh, and two with ſlight wounds:—11 in the liſt.

17. Yeſterday's patient, with indigeſtion, is recovered:—10 in the liſt.

18. The wounded patient of the 12th, and the two of the 16th, recovered ſo far as to do duty:—7 in the liſt.

19. No alteration in the ſick liſt.

20. No alteration.

21. The contuſed patient of the 12th, and the boy of the 16th, are recovered:—5 remaining on the liſt.

22. No alteration.

23. The epileptic patient has had fever, and recovered:—4 in the liſt.

24. No alteration of the liſt. PM a ſquall of wind blew remarkably hot off the land.

25. Four in the liſt. We caught a number of mackerel.

26. The other patient added the 2d, and the patient of the 14th, recovered; a marine ſeized yeſterday with fever:—3 in the liſt.

27. The marine is recovered; one complained of ulcer:—3 in the liſt. The laſt of

the people's portable ſoup is made uſe of. P M we anchored in Cape Cod Bay.

28. No alteration of the liſt. We moved and anchored in Cape Cod Harbour. Our water-caſks were ſent aſhore to be filled, and a corporal with ſix marines from each ſhip, and a marine officer to command them in the night, were ſent to guard the caſks.

29. The ſcorbutic patient of the 12th is recovered:—2 in the liſt.—Some fiſhermen live about this place, from whom we get a few fiſh for the ſhip's company.

30. No alteration of the liſt. The two ſick are, the boy who was added the 13th, with fever, and another on the 27th with ulcer.

SECT. III.

MONTHLY REVIEW OF THE SICK LIST, *From Sept.* 1, 1776, *till June* 30, 1777.

SEPTEMBER.

THE ſick liſt varied little, but often, until the middle of the month, when it decreaſed: it afterwards increaſed, though ſlowly, until

until the 24th, then varied a little, and decreaſed the laſt day.

The patients who complained were, four with fever, two with head-ache, ſixteen with dyſentery, one with belly-ache, one with opothalmia, one with hæmorrhoides, one with eruption, one with ſcald-head, three with ſtrain, two with contuſion, three with wound, one with ſwelling of the knee, and one with furuncle.—In all 37.

OCTOBER.

The fever patient who was taken ill the 22d ult. (a puny boy who had been returned to duty the 19th only) after having been in the liſt above three weeks, complained much of his head at firſt, and in two days after, of flux, which continued on him with head-ache a week, and weakened him ſo much, that it was a fortnight before he recovered. When he complained on the 22d, it was of bad cough, head-ache, and pain of his ſide; after this fever, which held him for eight or ten days, he was ſeized with diarrhœa and diabetes from weakneſs, of which he did not recover in many weeks.

The fever made its appearance on the 15th of September, the third day after we arrived at

Halifax; a young man, who belonged to a boat at that time, and therefore was probably on board the Lizard and aſhore at Halifax, was taken with *an ague*, he ſaid; but fortunately he ſoon got well: and even before him there were two had ſlight attacks of it. Some dyſenteric patients intervened between this man's being taken ill, and the recovery of the boy before-mentioned on the 19th, and his falling ill again on the 22d. I was ſurpriſed to find him ſo long in recovering, as I gave him the bark not ſparingly. There was another man ſeized with it on the 22d, who recovered perfectly well the 26th.

The ſhip's barber was the next perſon ſeized with it on the 3d; his attack was not violent, and being a tippling young lad, he went about the ſhip five or ſix days before he complained, leſt his grog ſhould have been ſtopped. He ſoon recovered.

Another young man, of a delicate conſtitution, complained of the fever the ſame day the barber did. He was very often ailing, but he luckily got quite well in a few days.

The next perſon ſeized with fever was a marine, who died the 8th day of his illneſs. He was much given to drinking, and had fre-

quently got drunk with ſmall beer; was much bloated, of an indolent diſpoſition; and not long before had a fit of drinking. I was much alarmed at ſeeing, on ſeveral parts of his body, a few hours after he died, large black blotches, particularly in thoſe parts he had lain upon. None of the ſymptoms were violent; therefore, as he was naturally of a very ſlothful diſpoſition, I did not apprehend he was in danger. His caſe will be related hereafter. On this occaſion, I was the more uneaſy, becauſe the ſymptoms about the other fever patients were more obſtinate than thoſe which had appeared in former months. Theſe circumſtances ſoon left me no room to doubt but that we had caught a virulent infection. I cannot determine whether we caught it on board of the Lizard, or at St. John's, or at Halifax, for the fever exiſted in, and we had communication at, all the three places within a few days. One thing is certain, that wherever it was contracted, the debauch which our people committed on the 15th of September, ſoon rouſed it into violent action. From a very healthy ſtate, we were ſuddenly plunged into a very ſickly and dangerous one.

Thirty-nine complained of fever, two of

dyſentery, one of rheumatiſm, two of hæmorrhoides, one of eruption, one of itch, one of ſtrain, and three of contuſion.—Fifty in all.

The method in which the fever was treated will be related in its proper place. None of the other complaints required any particular treatment. Beſides, it is my intention to confine my obſervation to fever.

NOVEMBER.

A good deal of pains was taken to clean and ſmoke the ſhip in different ways, the firſt of this month, with larger fires of junk and tobacco, than were generally made uſe of afterwards. To this precaution alone can be attributed the viſible check which was given to the fever: there being a decreaſe of no leſs than fifteen patients in the courſe of the month; and all who were in the liſt did well. The fact is ſo clear and inconteſtable, that nothing further need be ſaid in favour of ſmoking with large fires for three or four hours at a time, but more eſpecially with tobacco, when a ſhip becomes ſickly; nor of frequently repeating this proceſs, at leaſt as often as circumſtances will admit.—The ſick themſelves

not only found the air more cool and refreſhing after ſmoking, but thoſe in health, who lay in the tiers and more confined places of the ſhip, ſaid it was like a change of climate to them, ſo cool and agreeable the air was rendered. But it is likewiſe to be remembered, that the ſick were treated with bark.

On the 26th, the ſick, or rather convaleſcents, were ſent on ſhore at Halifax, with all their clothes, ſolely with an intention to get the ſhip cleared of the infection. Indeed, no other motive could have juſtified ſending people to ſuch quarters. Of all the neſts of filth combined with poverty, which I ever beheld, they were by far the moſt ſhameful. Where, or on whom this reproach falls, I know not; but what rendered it inexcuſable, is, that Halifax had never been moleſted by the rebels, and conſequently there were no concurring circumſtances to make it neceſſary to coop up the ſick and wounded ſeamen, in the moſt filthy and decayed houſe about town, with ſcarce a ſquare of glaſs in a window. As to their victualling, they were left to the mercy of an old woman and her daughter,

who farmed that part of the *dirty* buſineſs, I muſt call it *.

As ſoon as they were ſent on ſhore, the ſhip was cleaned and ſmoked with as much care as before, and we flattered ourſelves that, by repetitions of this proceſs, we ſhould be able to ſubdue the infection entirely; but, to our great mortification, ſixty ſupernumeraries were ſent on board in the evening from the Rainbow, eight of whom had ſhip fever; and there was no time to get an order to ſend them back that night.

Beſides eight ſupernumeraries ill of fever, who were ſent back to the Rainbow next day, 24 were added to the liſt this month with fever, one with ſcurvy, two with rheumatiſm, three with cough, one with ear-ache, one with hæmorrhoides, three with ſtrain, ſix with contuſion, two with wound, two with inflammation, and two with ulcer:—in all 47.

I have nothing to obſerve at preſent with reſpect to the manner in which thoſe men were treated.

* I will do the commander in chief the juſtice to ſay that I believe this was wholly unknown to him, or to his ſurgeon, who inſpected the hoſpitals where the fleet lay.

DECEMBER.

Only five were added with fever the firſt week; one or more were added every day in the ſecond week; and in the remaining part, excepting the 15th, 19th, and 26th, one or more complained of it daily. But if the ſtate of the weather, and the ſhip's being ſo much crowded on the paſſage from Halifax to New-York, be conſidered, it will not be thought ſurpriſing that we had one patient died, and ſuch an increaſe of the ſick liſt at the end of the month. On the laſt of November there were only 16 in it, including ſupernumeraries; and on the laſt of this month there were 35 in it; but the fever patients were then chiefly in a convaleſcent ſtate, though they were liable to relapſe from inattention, or the leaſt irregularity. There were 49 fever patients, one with dyſentery, one with belly-ache, nine with rheumatiſm, one with ſcrophula, one with cough, one froſt-bitten, two with rupture, ſix with contuſion, two with fracture, two with wound, two with inflammation, three with abſceſs, and one of ulcer, complained:—in all 83.

The ſymptoms of the fever were vehement this month, and were very obſtinate, particularly delirium. It was incident to thoſe who complained of rheumatiſm, and they, when ill of it, ſtood more in need of cordials than of evacuations. The reſt of the patients were treated after the uſual manner.

The paſſage to New-York was extremely diſagreeable from the length of time we were on it, the badneſs of the weather, the great number on board, and our being ſo ſickly. The ſick being unavoidably ſo ill accommodated in their berths, rendered it ſtill worſe. We had ſometimes three different gales of wind in the four-and-twenty hours.

JANUARY, 1777.

For the firſt nine days, excepting the 1ſt, 2d, and 5th, no fever patients complained. It may be obſerved, that the more ſick we had on board, the more patients we had daily complaining.—*Query*, if this might not proceed from the following cauſes:—Might not ſo many people as we had on board on the paſſage, crowded into ſo ſmall a ſpace, contribute to this?—When in ſuch a ſituation there are a number of ſick in a ſhip, will not the

infection daily acquire more virulence?—And, under theſe circumſtances, will not thoſe who are obliged to paſs and repaſs often in the courſe of twenty-four hours, by the ſick berth, be very apt to be affected by the ſight of the ſick, as well as by the infection?—That the wet decks, and the people lying in wet hammacoes (from the upper works of the ſhip being leaky), contributed thereto, no perſon will doubt.

Through the remaining part of the month, the men were taken ill nearly every other day; but, in order to get rid of the infection, they were ſent to the hoſpital ſoon after they complained, and a great deal of pains taken to keep the ſhip clean. Our people were very irregular this month. The ſhip being very near a wharf, and they having received a little prize money, it was all laid out for New-England new rum.—Whether the patient who died of fever the 14th, in ſo ſhort a time as thirty-nine hours after complaining, had drank any of that abominable new ſpirit, I know not for certain, though I ſuſpect he had. His caſe will be related in its proper place.

The patients that were added to the ſick

liſt, were, forty with fever, one with head-ache, one with dyſenteric ſymptoms, one with indigeſtion, ſeven with ſcurvy, five with rheumatiſm, two with ſore throat, nine with cough, three with nephritic ſymptoms, one froſt-bit, one with ſcald, ſix with contuſion, one with inflammation, one with abſceſs, one with furuncle, and one with excoriation: —in all 81.

FEBRUARY.

This was the moſt ſickly month we had in America; a greater number of fever patients being added to the liſt in the courſe of it, than in any other. Yet only one patient (a ſupernumerary who came from the Rainbow) died. Although the priſoners were on board of us only nine days, it cannot be doubted but that, by their crowding the ſhip, they promoted or increaſed the ſickneſs. One of them died on board, without my being informed of his illneſs, until a few hours before he died. By the accounts I had of his caſe, he was in ſome meaſure ſtarved from want of clothes and bedding. But as the priſon ſhip from whence they came was ſickly, as I was informed, it is more than probable that he was

infected before he left her; and on board of the Juno they were neceſſarily crowded together into the ſtarboard bay, where he had a wet deck only to lie upon. That part of the ſhip was unavoidably wet by the cables; and the bay had an offenſive ſmell for a conſiderable time after they were ſent away, though well cleaned and ſmoked. While theſe poor creatures were on board, our marines lay under the half-deck, where they caught cold, and were ſeized with fever.

The winds being generally northerly, the weather was very cold with ſnow. Every day, excepting the 4th, 8th, 16th, 20th, 21ſt, and 25th, fever patients were added to the liſt, to the number of 61, beſides one with head-ache, two with belly-ache, nine with ſcurvy, five with rheumatiſm, three with ſore throat, five with cough, one with nephritis, one froſt-bit, three with ſcald, one with ſtrain, two with rupture, ſix with contuſion, one with inflammation, one with furuncle, two with excoriation, and two with ulcer:—106 in all.

An urgent cough, with ſevere head-ache, were the moſt frequent and troubleſome ſymp-

toms of the fever this month. No fever patients were ſent to ſick quarters, but one from a prize without my knowledge.

MARCH.

The number of ſick were greatly diminiſhed this month, but ſtill the majority of thoſe who complained were fever patients, viz. 34; beſides two of indigeſtion, ſix of ſcurvy, three of rheumatiſm, three of cough, two of ear-ache, one of giddineſs, one of diabetes, four froſt-bit, three of contuſion, one of wound, two of inflammation, one of furuncle, one of excoriation, and three of ulcer:—in all 67. One of the fever patients died on the 12th, and another on the 18th; the former was the priſoner from the ſloop, who had been ſo long ill before he complained. Irregular people ſuffered far more than others in the fever,—their ſymptoms being more ſevere, and their relapſes more frequent. But I obſerved exceptions to this rule; for under the diſadvantages of irregularity, the utmoſt degree of filthineſs and nakedneſs, and of having a cheſt only to lie upon, without bedding, I have ſeen the ſick recover: and what is rather extraordinary, the young, raw, dirty lads

lads from Scotland, who had been but a ſhort time at ſea, were ſeldom ſeized with it. The man who was blown up or wounded on the 18th, died on the 23d. It was ſome time (perhaps a quarter of an hour) after the accident, before he recovered any motion or ſenſe, or felt any conſiderable pain, and he continued delirious throughout the firſt night.

Three fever patients were ſent to ſick quarters on the 28th. For the firſt five days, fever patients were daily added; but on the 6th, 7th, 13th, 18th, 20th, and 26th, no fever patients complained, nor through the remainder of the month, excepting the 27th; ſo that by far the greateſt number were added before the 18th, after which the infection began to decreaſe very obviouſly. This could proceed from nothing elſe but our firing ſo much on the 18th,* which not only ſmoked the ſhip thoroughly, but alſo the men and their clothes, which never could be done in the uſual way of ſmoking. The fact is clear, whatever conjectures may be formed on it, as appears by the daily ſtate of the ſick liſt ever after. Yet nothing but accidental cir-

* See pages 75 and 76.

cumſtances can procure to a ſickly ſhip's company ſuch a beneficial ſmoking; as the expences attending the conſumption of ſo much powder as we fired that day, will never be allowed. It may therefore be ſaid, with ſeeming propriety, that little advantage can be derived from this being known, unleſs it could be put in practice. I think, however, that this being inculcated on board of a ſickly ſhip, when coming to action, may be an additional inducement to them to perform their duty with becoming ſpirit.

APRIL.

Northerly winds were the moſt prevalent this month, conſequently the weather was rather cold and unpleaſant, though we had but little rain. It was of ſome benefit to the convaleſcents that they were allowed to walk on ſhore now and then; but a good ſick tent erected on ſhore, would have been of much more benefit, not only to all the ſick, but to the ſhip's company in general; as we might thereby, probably, have been able to have entirely *ſmoked* out the infection.

The ſick continued to decreaſe in number on the liſt, and the greateſt number of the fever

fever patients were added to it before the 19th, viz. on the 1ſt, 3d, 4th, 6th, 8th, 10th, 11th, 14th, 15th, 16th, 17th, 18th, 24th, and 27th. On the 24th, one died, who, I believe, came from the Rainbow. Two men* were ſent to ſick quarters with fever from a prize, and two from the ſhip on the 30th. All the patients of this month were, 27 with fever, one of phlethora, one of dyſentery, four of ſcurvy, two of ſore throat, one of cough, two of wound, and ſix of inflammation:—in all 44.

The moſt obſtinate ſymptoms of the fever this month, were head-ache, univerſal pains, and cough. The delirium was very urgent in that caſe which proved fatal.

MAY.

We now became daily more and more healthy. Only 28 patients complained the whole month: viz. 19 of fever, one of belly-ache, two of rheumatiſm, one of ſore throat, one of contuſion, one of inflammation, one of abſceſs, one of furuncle, and one of ulcer.

* Neither thoſe men, nor any ſent from prizes, were under my care. They are only mentioned as men belonging to the ſhip, who had fever.

The weather, though ſomewhat backward, was upon the whole temperate. The winds were moſtly between SE and NE. The NW on the 22d and 23d did much miſchief, as has been already obſerved, and likewiſe on the 28th.

The ſymptoms of the fever were now much milder; the head-ache, with pains in the limbs, as the patients expreſſed themſelves, were moſt troubleſome.

The gentleman went the 30th ult. from the prize to ſick quarters, where he died the 1ſt inſt. He had of late, I was informed, lived very irregularly, and was ſubject to complaints of his breaſt from a hurt which he formerly received. Five were ſent this month with fever to ſick quarters.

Our people, particularly thoſe who were ſcorbutic, received benefit from walking on ſhore; as well as from the portable ſoup and greens being boiled among their peaſe, and from the crout.

JUNE.

We had very little bad weather at ſea this month, it being chiefly mild, but the atmoſphere was either foggy, or in general very

hazy. The ſhip's company caught a great many fiſh, and they had their ſoup as uſual while it laſted, with crout, twice a week. Under theſe circumſtances the ſick liſt continued to decreaſe as to fever, to the great ſatisfaction of every perſon on board. Only twelve complained of fever, one of indigeſtion, three of ſcurvy, one of hæmorrhage, one of epilepſy, one of ſtrain, two of contuſion, four of wound, one of abſceſs, and one of ulcer—2:7 in all.

The head-ache was the moſt troubleſome ſymptom among the fever patients.

CHAP. III.

Monthly Review of the Sick List,

From July 1, 1777, *till July* 30, 1778, *with meteorological Observations, and remarkable Occurrences.*

July.

THE winds were variable, blowing moderately from every point of the compaſs in the courſe of the month. It was very ſeldom calm; 5th, 9th, 17th, and 20th, light ſhowers; and 22d, 23d, and 29th, ſhowers; the atmoſphere was generally hazy, foggy, or cloudy. On the 2d, 3d, and 4th, heavy dews: The rain fell on the 5th and 17th, with *t l*; 22d with *l*; and 29th with *t*. Mean height of the thermometer about 65; new moon 4th, full moon 20th.

The ſick liſt increaſed from three to nine in the courſe of the month; there were added to it in all ſeven with fever, the ſymptoms of which were become milder; one with head-ache, one with dyſenteric ſymptoms,

two

two with belly-ache, one with vomiting, three with indigeſtion, ſix with ſcurvy, two with rheumatiſm, one with hypochondria, one with worms (aſcarides), one with eruption, two with ſtrain, one with hydrocele, one with contuſion, three with inflammation, and one with ulcer:—in all 34.

On the 26th a caſk of molaſſes was taken out of a prize for each of the three ſhips companies, and eight caſks of limes were divided among them; the Orpheus had one half of the limes, as her people were the moſt ſickly with fever and ſcurvy. I got 18 bottles of ſmall French wine for the uſe of the ſick.

On the 28th, I put three gallons of lime juice and ſix of molaſſes in 18 gallons of rum (but, by miſtake, the ſteward put in more rum than I directed), to be ſerved, when diluted with water, to the ſcorbutic people, in the room of grog.

On the 31ſt we got a little ſtock out of a prize, which was divided among the three ſhips.

The porter was ſerved out to the ſhip's company, as a free gift, a pint a day to each man.—A priſoner, who came from the molaſſes veſſel, complained of inflamed eye.

He ſaid it proceeded from the ſteam of the molaſſes, when ſtarting it out of one caſk into another about a fortnight before; and that all the men who were employed about that buſineſs, were affected in the ſame manner.

One of our men died the 25th, of his fever, at ſick quarters.

AUGUST.

The wind was variable and very moderate, but more from the S than any other quarter, till the 26th, when it came Nly, and continued ſo, but was ſtill moderate until the 31ſt. It rained the 2d and 15th, with *t l*; 3d, 17th, 18th, 19th, 20th, and 27th, light ſhowers; 5th, and 26th, ſhowers; 10th, 11th, 12th, 13th, 14th, and 23d, *l*. The atmoſphere in general was hazy and cloudy, but the 6th, 7th, and 8th we had fogs. New moon the 3d, and full moon 18th. The thermometer was never lower than 68, nor higher than 78.

The ſick liſt varied little, but continued rather increaſing until the 12th. On the 13th we arrived at Rhode-Iſland;—the people of the Orpheus continued ſickly all the voyage.

The dyſentery began now to attack the people. I ſent to ſick quarters on the 14th, one with fever, three with flux, one with bad cough, and three with ſcurvy. From the 14th the liſt varied frequently until the end of the month.—On the 28th, one with dyſentery, one with vomica, and one with hydrocele, were ſent to ſick quarters. A third part of the ſhip's company were ſent in their turns on ſhore, to walk and gather apples, when the ſhip's duty and the weather permitted. On the 15th we anchored up the harbour, off Prudence.

The patients who complained were, nine of fever, one of pleuriſy, five of dyſentery, one of vomiting, one of indigeſtion, three of ſcurvy, one of rheumatiſm, one of hypochondria, one of vomica, one of cough, one of eruption, one of ſtrain, two of contuſion, two of inflammation, one of abſceſs, one of furuncle, and one of ulcer:—in all 33.

There were no unuſual ſymptoms either among the fever or dyſenteric patients.

SEPTEMBER.

Northerly and NE winds were moſt prevalent: ſome days they were variable, ſeldom

calm, and always moderate; 6th, 7th, 10th, 19th, 22d, and 26th, light ſhowers; 17th, and 23d, ſhowers; 18th, hard ſhowers; 21ſt, *t.* The atmoſphere was generally cloudy, ſometimes clear, and very ſeldom hazy. New moon the 1ſt, and full moon the 17th. The mean height of the thermometer was about 66.

The ſick liſt varied little, but rather increaſed all the month with dyſenteric patients, one of whom died on the 19th; but fever with petechiæ accompanied his flux. Nothing uncommon happened in the dyſentery. On the 4th, a corporal and two marines were ſhot, and one wounded on ſhore by the rebels; while they were guarding the watering party, above 200 rebels attacked the corporal and ſix marines, the boat's crew, a midſhipman, and the cooper. On the 12th, a man was killed by a fall from the main-top.

Five patients were added with fever, fifteen with dyſentery, one with ſore throat, five with contuſion, two with wound, and two with furuncle:—30 in all. On the 14th, ſent one of the fever patients to ſick quarters.

OCTOBER.

Northerly winds prevailed more than the Southerly; 1ſt, 2d, 25th, and 26th were calm, but theſe calms were not throughout the whole day; it was moſtly moderate, and ſometimes variable. On the 18th, 27th, 28th, and 29th, gales; 9th, ſhowers; 13th, 18th, 21ſt, 24th, 25th, 26th, 27th, and 29th, light ſhowers; 28th, heavy rain. The atmoſphere was generally hazy or cloudy: new moon the 1ſt, full moon 15th. The mean height of the thermometer was about 60. From the 22d to the end, the weather became cold.

The ſick liſt rather increaſed all the month, the dyſentery ſtill prevailing. On the 1ſt, four were ſent to ſick quarters with dyſentery, and one with fever; one died of flux the 10th, and two, with dyſentery, were ſent to ſick quarters. The dyſentery was very obſtinate, but there was nothing unuſual among the fever patients, Nine were added with fever, fourteen with dyſentery, one with cholera morbus, two with rheumatiſm, one with ſore throat, three with contuſion, one with inflammation, and one with abſceſs:—in all 32.

NOVEMBER.

For the firſt four or five days the wind was Southerly and Weſterly (though it froze on the 1ſt), and then came round to the Northward, varying, with rain, and fixed for two days in the N W with freſh gales. It blew Southerly again for one day, then returned to the N and N W for three days with rain; veered again for a ſhort time to the S W, and gradually came back to the W N W, W, and NW, for ten days, with froſt and ſome ſnow, blowing ſtrong at times. From the S W it blew freſh one day, varied, became Northerly, then Southerly and Weſterly—N W again—variable and Eaſterly with ſtrong gales. The 12th, 13th, 17th, and 18th, gales; 29th, ſtrong gales, 22d and 23d, ſhort calms; 6th, heavy rain; 5th, 8th, 9th, 10th, 22d, 26th, 29th, 30th, light ſhowers. The atmoſphere was generally cloudy or hazy. The moon was full the 14th, and changed the 29th. The mean height of the thermometer was about 46.

On the 18th we dropped down to New-Port; 23d ſailed with a convoy, and returned next day. 27th ſailed again, and anchored

at Block-Iſland P M.—28th ſailed with a convoy towards Sandy-Hook; 29th, they were all diſperſed by the gale of wind. The Diamond, Flora, and Lark, were out on a cruiſe, and got very ſickly from the bad weather, and from infection communicated by priſoners taken out of the prizes. The ſmall-pox was on board the Lark.

The ſick liſt varied very little, but towards the end of the month it was increaſed by hurt patients. This was the healthieſt month we enjoyed in America while the Juno was employed; only twenty-one patients having complained, viz. one of fever, one of head-ache, two of dyſentery, one of rheumatiſm, one of palpitation of the heart, one of cough, two of ſcald, ſix of contuſion, two of wound, three of inflammation, and one of furuncle.

Two with rheumatiſm, and one with ſcald head, were ſent to ſick quarters on the 19th, and one on the 26th with fever.

This was an agreeable change for the better. Our men were very ſeldom on ſhore, and only at firſt, when we went up to Prudence; and the weather was far colder in February laſt than it was in this month. On the 21ſt, ſix of our men, who had been taken priſoners

the 4th of Sept. returned in a flag of truce, and another of them eſcaped out of priſon. When they came on board, I got them well waſhed with warm water, then with warm vinegar, and got clean cloaths put on them. Afterwards I gave each of them of Huxham's *Tinct. of Bark*, ℥i. *Tartar emet.* gr. ¼ and *Aq. ſimp.* ℥iſs.

DECEMBER.

The wind was chiefly from WSW to NE, and, unleſs in the beginning of the month, when it blew ſtrong gales, was commonly moderate.—The 2d, 13th, 15th, 17th, 18th, 27th, light ſhowers; 29th, gales, with light ſhowers. We had only nine days without froſt, and ſnow fell on four days only. The atmoſphere was oftener cloudy and hazy, than quite clear. Full moon the 14th, new moon the 29th:—it was very cold about the end of the month. The mean height of the thermometer was about 44.

We returned to New-Port the 7th; our ſick liſt increaſed until the 19th, and all the week following decreaſed, and from the 27th until the end of the month, increaſed. A fever patient was ſent to ſick quarters the 12th, and another of fever, and one dyſenteric pa-

tient, on the 27th. Query, Did the increaſe of fever and dyſenteric patients proceed from the blowing weather at the end of the laſt, and beginning of this month?—our hatches being then battened down. On the morning of the 30th, every thing on board which the wind blew upon, had the appearance of being caſed over with ice, it having rained, hailed, ſnowed, and froze in the night.—The ſhip's decks were very leaky, many of the men were wet in their hammacoes, and a great deal of water was between decks. Moſt of the fever patients were lying in the bays, where the air is much confined. The man who firſt complained of the fever this month, was delirious when I was ſent for.

The number of patients added to the ſick liſt this month, were ten of fever, four of dyſentery, ſix of rheumatiſm, five of cough, one of ear-ache, one of hernia, three of contuſion, and two of furuncle:—in all 32.

The Nonſuch, Raiſonable, and Somerſet were very ſickly.—The Nonſuch left England in March, and fifty of her men have been already carried off by fever. Each of theſe ſhips has now between 130 and 150 men on their ſick liſt. The fever prevails on board

the Somerſet, and the other two ſhips have far more ſcorbutic than fever.—The fever and dyſentery raged much to the Southward this laſt campaign.

JANUARY. 1778.

The wind blew from between NW and SW more than from any other part of the compaſs. On the 8th, 17th, 18th, 21ſt, and 29th, we had generally freſh gales, but on the 7th, 27th, and 30th, calms for a ſhort time; at the beginning of the month, there was ſome froſt, and a good deal between the 14th, and 26th; 3d, 8th, 10th, and 18th, light ſhowers; 11th, 17th, light ſhowers with ſnow; 29th, and 31ſt, heavy rains; 5th, 20th, 24th, and 25th, ſnow. Full moon 14th, new moon 28th. The mean height of the thermometer was about 39. The atmoſphere was chiefly hazy and cloudy.

The ſick liſt decreaſed until the 8th,—increaſed for two days,—decreaſed until the 22d, and increaſed again until the end of the month. There were never more than twelve in it. The patients who complained were ſix of fever, one of head-ache, one of dyſentery, one of vomiting, five of rheumatiſm, one of

ſore throat, one of ophthalmia, one of contuſion, one of fracture, one of wound, one of inflammation, one of abſceſs, and five with furuncle:—26 in all.

On the 2d we ſailed to Long-Iſland, and returned the 6th, when we found Lord Howe on board the Eagle:—that ſhip was far from being healthy. We ſailed the 7th, returned the 9th, and on the 20th went up and lay between Rhode-Iſland and Prudence; 31ſt anchored at Prudence.—Nothing particular happened among the ſick this month.

FEBRUARY.

A moderate Weſterly wind for the firſt five days was ſucceeded by a ſhort calm; it came to the Eaſtward on the 6th, and blew violently on the morning of the 7th from N N E with ſnow; much damage was done by the gale. It was afterwards variable, but oftener from the N W than from any other quarter. The 12th, 13th, 17th, 20th, and 21ſt, were calm. The atmoſphere was ſometimes clear, but generally cloudy or hazy, excepting the 11th and 27th, ſhowers; 16th, and 26th, light ditto. It generally freezed from the 6th to the end of the month, and a good deal of

ſnow fell. The moon was full the 11th, and changed the 26th. The mean height of the thermometer was 44.

On the 15th we ſailed in company with the Cerberus and Haerlem, and 24 ſail, chiefly of tranſports, all carrying flags of truce; towards evening, we and the Cerberus parted from the Haerlem and tranſports, and on the 21ſt, P.M, we arrived in Cape Cod bay or harbour.

The ſick liſt varied until the 10th,—rather increaſed until the 18th, and was afterwards variable until the end of the month. There were never more than 18 in it:—in all 35 were added to it; viz eleven who complained of fever, one of dyſentery, two of ſcurvy, one of rheumatiſm, one of hæmoptoe, two of ſore throat, two of cough, one of nephritis, four froſt-bit, one of ſcald, three of contuſion, one of wound, one of inflammation, one of abſceſs, one of furuncle, and two of ulcer.

I ſuppoſe it will hardly be doubted but that the badneſs of the weather was the cauſe of the fever prevailing again.—The ſurgeon of the Eagle informed me, that the yellow fever

appeared

appeared with violence on board of the fleet laſt ſummer, between New-York and Cheſapeak.

MARCH.

The 1ſt, the wind was S W, 2d, *f* S W *t* W N W, 3d, Northerly with calms; 4th, N W with freſh breezes; until the 21ſt, it blew variably and ſeldom ſtrong; 21ſt and 22d, calms, and airs from N N W; then it was variable, and rather moderate until the 29th, when a moſt violent gale of wind came on at E S E, veered round gradually to the N W blowing ſtrong gales the 30th and 31ſt: the froſt, with ſnow every day except the 6th and 8th, continued till the 9th; 10th, 11th, 12th, 13th, and 17th, light ſhowers; 16th, 31ſt, ſnow; 21ſt, 22d, and 23d, froſt; 28th, 29th, hail; 30th, ſhowers. We had the atmoſphere more clear than uſual, but it was frequently hazy and cloudy. Full moon the 12th, new moon 28th. The mean height of the thermometer was between 33 and 34.

On the 1ſt, the Haerlem came into Cape Cod Bay, with 21 ſail of tranſports; the lieutenant who commanded her, as alſo his clerk, two midſhipman, and a number of the people, were ill of fever. One of her men

died, and moſt of them recovered with difficulty. Our ſecond lieutenant caught the infection by being on board of her on duty. She was cleared, and ſent as a flag of truce to Boſton:—our firſt lieutenant and my firſt mate went in her. Several men were taken ill, but, by following the method uſed in our ſhip, they ſoon recovered.—17th, the Centurion joined us with orders from Lord Howe, and on the 19th the Orpheus joined us from a cruiſe; they had the ſmall-pox on board, and ſeveral paſſengers from Rhode-Iſland. 25th we ſailed, and arrived the 29th, with the Cerberus and moſt of the tranſports, at New-Port. Captain Griffith commanded.

The ſick liſt varied from the beginning until the 29th, when it decreaſed until the end, though very little.—Six complained of fever, one of dyſentery, two of rheumatiſm, ſix of ophthalmia, one of nephritis, one of itch, one froſt-bit, two of contuſion, one of inflammation, and three of furuncle:—in all 24.

The patients fewer than in the preceding month; but our men had neither been fatigued nor got wet, excepting the waterers ſometimes, and they had an opportunity to purchaſe plenty of freſh fiſh and potatoes.

APRIL.

APRIL.

The wind varied frequently until the 10th, and blew a ſtrong gale the 3d; from the 10th till the 15th, it was Southerly, light airs and freſh breezes, and then chiefly Weſterly until the 26th; 19th, 22d, 26th, 27th, Southerly; 23d and 30th, gales; 28th, variable, and NNE afterwards; 3d, *t l* with ſhowers; 4th, and 20th, ſnow; 5th, 15th, 22d, and 30th, ſhowers; 9th, froſt and ſnow; 16th and 17th, light ſhowers. The atmoſphere was ſeldom clear, but generally cloudy or hazy.—Full moon the 11th, changed the 26th. Mean height of the thermometer about 53.

The Venus was at Rhode-Iſland, and very ſickly. The ſurgeon told me they had loſt about fifty men of fever, which ſtill continued to rage on board.—I think he ſaid they became ſickly from being crowded with priſoners, and cruiſing with them on board in bad weather. They were ſo ſickly, that they were obliged to come in before their cruiſe was out.—Their full complement was 240 men. In what manner he treated them, I did not aſk himſelf, but I am informed by a ſurgeon, an intimate friend of his, who was on the ſpot, that he followed the antimonial method.

The Haerlem came in; her people are recovering very ſlowly—9th we ſailed and anchored in the Naragancette paſſage, and relieved the Somerſet, which ſtill continued ſickly. I am told they buried ninety men of the fever ſince they left England, ſeventy of whom were of their beſt ſeamen.

On the 2d I ſent a contuſed patient to ſick quarters. A man who entered from a tranſport at Cape Cod, complained in the afternoon of the 3d of fever:—of which he, with two more of her people, had been lately ill. I ſaw ſeveral inſtances of tranſports becoming ſickly from having ſick ſoldiers on board.—Several of our men were ſeized with fever, by their having been on board the Somerſet on the 9th. One in particular told me, that while he was on board of her, one of her people (who came very near him) ſmelled very diſagreeably to him.

The ſick liſt varied often, but it rather increaſed until the 14th,—then it altered very little until the 23d, when it began to increaſe for four days, and after that to decreaſe. In all, 25 patients complained; viz. eleven of fever, one of dyſentery, one of ſcurvy, one of ſore throat, one of worms, four of contuſion,

tuſion, one of wound, three of inflammation, one of abſceſs, and one of furuncle.

When our ſick men had leave to go on ſhore, to walk, they were forbid to go near the Somerſet's old hoſpital; they bought milk. —I began on the 9th to dig a garden.

On the 30th a rebel frigate outward bound paſſed and fired at us, without hurting any body.

MAY.

Moderate Southerly and variable winds chiefly prevailed, but when it veered round to the Northward, there was a freſh breeze:—the Southerly winds were the ſea breezes. The 1ſt and 2d, Nly, with ſhowers; 4th, 10th, 16th, 17th, 22d, and 31ſt, light ſhowers; 8th, 14th, ſhowers; 11th, 12th, 13th, 18th, 19th, 28th, 29th, 30th, dews; 15th, dews with light ſhowers; 24th, dews with *l*; 27th, hard ſhowers. The atmoſphere was more frequently hazy or cloudy than clear,—14th and 15th were foggy. The moon was full the 11th, and changed the 26th. Mean height of the thermometer, about 61.

The ſick liſt varied very little all the month, but rather increaſed towards the end; but fewer were added to it than in any other

month. The patients who complained were, eight of fever, one of head-ache, two of rheumatiſm, three of contuſion, and one of furuncle:—in all 15 only. Our people had leave to walk on Cannanicut, to gather greens; about the 20th they began fiſhing with lines; they alſo bought potatoes.

The Lark had three killed and eight wounded by the rebel frigate on the 30th ult.—On the 4th, ſick quarters were broken up at New-Port, and all the ſick men were carried to Capt. Brenton's houſe on the Neck, which is converted into an hoſpital.

JUNE.

The 1ſt and 2d the wind was Southerly with freſh breezes; 3d, 4th, and 5th, Nly and NE with light airs and freſh breezes; until the 12th, it was Sly, *i. e.* from SE to SW: until the 17th, it was Nly, though generally calm; 17th, 18th, and 19th, ſea and land breezes, and calms; 20th, 21ſt, Sly; 22d and 23d, NE, freſh breezes and calms, and then Sly with frequently calms in the morning until the end. The 1ſt, 3d, 5th, 26th; light ſhowers; 2d, hard ſhowers; 4th, 7th, 8th, and 21ſt, ſhowers; 17th,

t l with light ſhowers; 28th, *l*; 29th, and 30th, *t l*. Dews fell every night when it did not rain, except the two laſt nights. The atmoſphere was generally hazy, ſometimes cloudy, and at others clear; the 3d and 6th were foggy. The moon was full the 9th, and changed the 24th. The mean height of the thermometer was about 70:—towards the end of the month, the weather became very hot, and the ground was burnt up.

The ſick liſt varied but little all the month; indeed it did not vary leſs in any one preceding.—Thoſe who complained were, ſix of fever, one of head-ache, one of dyſentery, one of ſcurvy, two of rheumatiſm, one of hæmoptoe, one of ſore throat, two of contuſion, two of fracture, one of wound, two of inflammation, two of abſceſs, two of furuncle, and two of ulcer:—26 in all. Nothing particular occurred among them.

JULY.

Part of the 2d the wind was NW, 7th was calm, the 12th and 13th, the wind was NW and Nly; the 17th Ely; from the 20th to the 25th, Nly and NNE; throughout the reſt of the month it was moſtly Sly, but

ſometimes it was late before the ſea-breeze ſet in. The 1ſt, 2d, 3d, 8th, 9th, and 12th, *t l*; 2d, 3d, 4th, 9th, 10th, 11th, 14th, 20th, 22d, 23d, 28th, and 29th, light ſhowers: —the ſqualls always came from the NW. Dews in the night. The atmoſphere was not often clear, but generally hazy or cloudy. The 10th, 27th, and 31ſt, we had fogs. Full moon the 9th,—changed 23d. Mean height of the thermometer was about 74. The weather was frequently very hot.

On the 29th, the French fleet appeared off the harbour's mouth, conſiſting of twelve ſail of the line and three frigates. All our frigates immediately got under way, and went cloſe in to different parts of Rhode-Iſland.—30th, two of the enemy's ſhips went up the Narragancette, and two up the Seconnette. PM the King's Fiſher, Alarm, and Spitfire galleys were burnt in the Seconnette, to prevent their falling into the enemy's hands. As ſoon as we got into Coddington-Cove laſt night, the people were employed about getting the guns on ſhore, with ammunition, proviſions, and ſtores.—31ſt, our people were employed as before. Tents were erected aſhore.

The ſick liſt rather increaſed till the 12th, and after that varied and decreaſed. The patients who complained were, ſix of fever, two of head-ache, one of dyſentery, one of rheumatiſm, one of cough, one of epilepſy, one of ſcald, two of contuſion, five of wound, four of abſceſs, five of furuncle, five ſtung by inſects, and one of ulcer:—35 in all. One of the head-ache patients, who is ill of fever, was a priſoner while he was ſeized with it.

None but a guard ſlept on board after the 29th.—It is ſomewhat remarkable, that during ſuch uncommon duty as was performed by our people the three laſt days of the month, and with ſo much unavoidable hurry as attended it, no accidents happened among them. Several of them were bit in the tents by inſects.—Nothing particular occurred among the patients. On the laſt day of the month we had only lame people in the ſick liſt.

The Journal ends here very properly. However, I cannot help making mention of a marine, who complained the firſt of Auguſt:—After having been very drunk (probably with bad ſpirits) and lying in the ſun the preceding day, he was ſeized in the night with various ſymptoms, and in the forenoon his head ached, he was griped, very thirſty, and complained of weakneſs. I gave him an emetic, and ordered him an ounce of ſalts; but as they gave him no ſtool, and he complained much of his bowels and limbs paining him, towards evening I ordered him a clyſter, which procured two ſtools, with a diſcharge of much wind, and relieved him greatly, he ſaid:—however, he died in the night. I know not what was the cauſe of his death, whether it was owing to the liquor he drank, or to a coup-de-ſoleil, or what; I do not think it was ſimply fever. He expired in a ſhorter time than the man who died on the 14th of January, 1777, at New-York, whom I ſuſpected of having drank ſome bad new ſpirit.

Although the infection received a very evident check on the 18th of March, by our firing ſo much, and ſeemed to be wholly ſubdued in the month of November following; yet we find it ſtill continued on board, though dormant, and only required ſome particular circumſtance to rouſe it into action, which happened in the beginning of December, by a ſeries of bad weather. Perhaps infected clothes had been ſtolen from ſome of the men who died, and concealed until thoſe in whoſe poſſeſſion they were, uſed them to ſhift their own, now rendered uncomfortably wet. From my knowledge of ſeamen and marines, I think this is more than probable, although I cannot demonſtrate it as a fact.

The MONTHLY STATE of His Majesty's Ship JUNO's SICK LIST, from the 4th of April 1776, to the 30th of July, 1778; the number that died, and of what Diſeaſe; the number ſent to Hoſpitals, and for what Diſeaſe; and the number who died of Fever at Hoſpitals.

Years	1776									1777										1778							Collective Numbers				
DISEASES	April	May	June	July	Auguſt	September	October	November	December	January	February	March	April	May	June	July	Auguſt	September	October	November	December	January	February	March	April	May	June	July	Number of Diſeaſes	Deaths on board	Number ſent to Hoſpitals	Number of Deaths in Hoſpitals.	
Fever	30	40	16	7	3	5	43	25	50	44	62	34	27	19	13	7	9	5	9	4	8	7	11	6	12	7	6	6	512	7	69	9	
Pleuriſy		1	1										1				1												4				
Quinſey		1																											1				
Dyſentery		1	5	1	9	16	2		1	1						1	5	15	14	2	4	1	1	1	1		1	1	83	2	11		
Belly-iche		3		1	2	1			1		2			1		2													13				
Cholera Morbus																			1										1				
Worms																1									1				2				
Indigeſtion										1		2			1	3	1												8				
Vomiting																	1					1							2				
Rheumatiſm	1	1	1	2	1		1	2	9	5	5	3		2	1	2	1		2	1	6	5	1	2		2	2	1	59		6		
Gout	1		2																										3		1		
Scurvy	2		2	3	1			1		7	9	6	3		3	6	3						2		1		1		50		23		
Scrophula									1																				1				
Head-ache					1	2				1	1		1			1				1		1			1		2		13				
Giddineſs					1							1																	2				
Epilepſy			1	1											1												1		4		2		
Sore Throat				1	2					2	3		2	1				1	1			1	2		1		1		18				
Cough	1		2	4	3			3	1	9	5	3	1			1	1			1	5		2					1	43		9		
Hæmoptyſis																							1						2		1		
Vomica																	1												1		1		
Hectic	2				1																								3		1		
Ophthalmia						1																1		6					8				
Hæmorrhage			1												1														2				
Ear-ache								1				2									1								4				
Deafneſs		1			1																								2				
Palpitation of the heart																				1									1				
Singultus		1																											1	1			
Hypochondria																	1												1				
Nephritis		1								3	1											1	1						7				
Diabetes												1																	1		1		
Hæmorrhoides	1	1				1	2	1																					6				
Eruption	1	2			1	1	1									1	1												8		2		
Itch	4	1	1				1																	1					8				
Seald Head						1																							1		1		
Scald	1									1	3												1					1	7				
Excoriation	1		1							1	2	1																	6				
Froſtbit									1	1	1	4							2				4	1					14				
Strain	2			1	1	3	1	3	2		1			1	1	2	1												19				
Rupture			1						2		2										1								6		1		
Contuſion	3	7	8	5	1	2	3	6	6	6	6	3			2	1	2	5	3	6	3	1	3	2	4	3	2	2	95		2		
Fracture	1			1					2													1					2		7	1			
Encyſted Tumour																1													1				
White Swelling	1	1				1																							3				
Hydrocele																1													1		1		
Wound		1		1	3	3		2	2			1	2		4			2		2		1	1		1		1	5	32	1			
Stung by inſects																												5	5				
Inflammation	3	2		1	1			2	2	1	1	2	6	1		3	2		1	3		1	1	1	3		2		39				
Furuncle					1	1				1	1	1		1			1	2		1	2	5	1	3	1	1	2	5	30				
Abſceſs	2	8		2	1				3	1				1	1		1		1			1	1		1		2	4	30				
Ulcer	5			1				2			2	3		1	1	1	1						2				2	1	22		5		
Accidents																		4											4	3,1			Three were killed on Shore
Monthly Number of Diſeaſes	62	73	42	32	34	38	51	48	83	85	107	67	43	28	29	34	33	34	32	24	30	27	35	24	26	14	26	35	1196				
Deaths on board		1	1				1		1	1	1	3	1					5	1											16			
Number ſent to Hoſpitals																															133		
Sent for Fever only																															62		
Number of mortal Fevers in Hoſpitals.																																9	

OBSERVATIONS, &c.

CHAP. V.

SECT. I.

EXORDIUM.

IN the following deſcription, the fever is diurnally deſcribed, and the ſymptoms are arranged as they daily appeared; but it is not to be underſtood, becauſe ſome of them are repeated for many days ſucceſſively, that they have been confined all along to thoſe in whom they firſt appeared:—on the contrary, they are to be conſidered as now making their firſt appearance in other caſes. It is alſo to be underſtood, that ſome were ſeized with more, and others with fewer ſymptoms, and that

they were combined very differently with reſpect to the order in which, for method's ſake, they are here arranged. To avoid repetitions, theſe ſymptoms are only generally mentioned which were moſt urgent; but when the fever is on its decline, about the 31ſt day, and few are then ill, the moſt remarkable appearances are daily repeated.

Though the ſymptoms which we have termed diagnoſtic, generally introduce the fever, it was, at its firſt appearance, attended with many others. 'Tis highly neceſſary, I think, that young practitioners ſhould not only be appriſed of this, but that they ſhould be made acquainted with all the various appearances which the fever puts on, from its commencement to its termination, in a number of patients living as nearly as poſſible in the ſame manner;—and this is the reaſon I have taken the trouble to deſcribe it ſo minutely. The more we conſider ſuch variety of ſymptoms occurring in the ſame diſeaſe, among perſons living under the ſame regimen, the more we muſt be convinced that they are regulated more by the conſtitution of the patient, than by all other circumſtances.

SECT. II.

The SHIP FEVER *described, diurnally.*

THE diagnoſtic ſymptoms, or thoſe which generally introduce ſhip fever, are rigours or chillineſs, or alternate chills and heats; ſickneſs at ſtomach, head-ache, univerſal pains (or, as the ſick expreſs it, pains all over them, or pains in all their bones), but eſpecially in the loins or back, and a morbid appearance in the countenance, with leſs or more debility.

But ſome informed me, that before the ſhivering and other ſymptoms were perceived, they had been ailing, or not well, as they ſaid, for ſeveral days,—a week or a fortnight,—three weeks—and even a month:—ſo long did ſome droop. The duration and violence of the rigours, chillineſs, or alternate chills and heats which introduced the fever, varied greatly; and theſe again were either ſucceeded by the following ſymptoms, or accompanied with many of them; and they were very irregular in different perſons, both as to their violence and duration.

General debility, univerſal ſoreneſs, or, in their own words, weakneſs in all their limbs, and ſoreneſs all over; great depreſſion, apprehenſion, deſpondency, laſſitude, faintneſs, extreme coldneſs, ſyncope, and epilepſy; a bitter taſte in the mouth, oppreſſion about the præcordia, nauſea, retching, porraceous or bilious vomiting, a ſlight cholera morbus, belly-ache, dyſenteric ſymptoms, diarrhæa with ſuppreſſion of urine, or the oppoſite extreme of coſtiveneſs; the head either much confuſed, or diſturbed with pain in the temples, or in the back part, or in the forehead; giddineſs, or deafneſs; hæmorrhage at the noſe, tooth-ache, ſore throat, and relaxed uvula; ſenſation of ſwelling about the præcordia, and of the abdomen after chillineſs; pains at the præcordia previous to vomiting, uneaſineſs in the thorax, very acute pains of either ſide,* reſembling pleuriſy, urgent cough, and difficult reſpiration; pain of the ſide, ſhooting down into the groin or thigh, pain in both ilia, that deſcended to the feet, pain

* Violent local pains ſuſpend the patient's attention to, or his ſenſation of, ſlighter ſymptoms—of which they again complain as ſoon as the violent pain is relieved.

reaching from the crown of the head to the ſole of the foot of one ſide; pain of the right ſhoulder, pain of the hams. Some, at the very beginning, had great heat, and much perſpiration, without any previous ſhivering† or coldneſs; and in ſome furuncles appeared*.

Various degrees of heat and thirſt ſucceeded the rigours and chillineſs in different perſons. In ſome, the heat was burning, and the thirſt inſatiable; and in others both were moderate, though greater than in health. The pulſe varied no leſs; and as all thoſe variations were perceptible throughout the fever, they will be ſeldom repeated.

Such were the ſymptoms which at firſt uſhered in the fever.

Firſt Day.—Of thoſe who were ſeized in the forenoon or afternoon, and complained immediately, numbers had remiſſions, and were much relieved within the firſt twenty-four hours by a vomit, which was inſtantly given; and by a free perſpiration procured in

† Perhaps it was owing to their ſlightneſs that the patients did not attend to them, though they did precede the heat.

* I ſuſpect thoſe made their appearance before the patient was ſeized with fever.

the

the night, by ſudorifics and diluting drinks; and ſome even recovered by theſe means—but few had remiſſions without ſuch aſſiſtance.

2.—Many paſſed a reſtleſs night from having no remiſſion; ſome had a remiſſion, which, as well as the exacerbations and paroxyſms throughout the courſe of the diſeaſe, were very irregular with reſpect to the period at which they appeared, and their duration. Many had remiſſions of particular ſymptoms, while the reſt continued as violent as ever; and theſe remiſſions, whether more or leſs diſtinct, were generally effected by perſpiration, and in ſome caſes by ſtools,* very ſeldom by vomiting.† But profuſe evacuations, either by ſweat or ſtool, were ſo far from procuring remiſſions, that they generally ſeemed to increaſe the ſymptoms. Some were yet chilly—others had alternate chills and heats, and ſome had ſenſation of cold in the back only. The moſt general and the moſt urgent ſymptoms were head-ache, lumbago,

* The natural or ſpontaneous evacuations are here meant.

† This patient came from the hoſpital the day before, and relapſed.

and univerſal pain. The head was now affected in a more violent degree with heavineſs, lightneſs and giddineſs from looking at any object, together with a burning heat and profuſe ſweats in the fore-head; pain of the left eye, or of both eyes, though neither were inflamed; pain over the eyes, eſpecially in ſtooping down; ſhooting pains in the eyes, and an unuſual motion in them; inflammation of the eyes, with an eruption in the face, which in others was turgid, and the eyes watery. The head appeared ſwelled; pain in both ears, and a diſcharge from the left with pain; deafneſs, pain of the one ſide of the neck and ſhoulder;—ſore throat, hoarſeneſs, and difficulty of ſwallowing were greatly increaſed by either teaſing or violent cough; as in like manner were the giddineſs, and the pain in the thorax, the abdomen, and the extremities. The right ſide was moſt frequently affected. The ſtomach and bowels were as much diſturbed with pain, nauſea, retching, vomiting, coſtiveneſs, or purging, as before. Cramps and ſpaſms of the limbs, and pains of the heels, were complained of.—There was now univerſal uneaſineſs, beſides ſoreneſs; proſtration of ſtrength and ſpirits, and faintneſs,

neſs, while ſome thought themſelves neither well nor ill. A number were troubled with great anxiety, much uneaſineſs and pain at the heart (as they ſaid, pointing to the præcordia); bitter taſte of the mouth, porraceous vomiting and purging, hæmorrhage from the left noſtril, expectoration of fetid pus, hæmoptoe, delirium, and petechiæ, were frequent.

The countenance appeared greatly flushed, and the eyes inflamed, as if the patient had drank; or it was pale or ſallow, and greatly diſeaſed:—it appeared wild, while the patient thought himſelf well. There were furuncles on the neck, and an angry eruption on the pained ſide of the thorax; the tongue was chopt acroſs, foul, or blackiſh; the pulſe was preternaturally full and ſoft; there was yellowiſh, viſcid, jelly-like diſcharge from liſtered parts.

In the afternoon there were many ſlight and ſhort remiſſions, but more exacerbations; and the former were followed by violent paroxyſms, preceded in ſeveral caſes with, and in others without, ſhivering. Relapſes happened from, or were haſtened by, irregularity; there were

interrupted profuſe ſweats, and the perſpiration, thirſt, heat, and pulſe, varied much.

3.—A few were ſent to the hoſpital,—ſome recovered, others were now arrived at a ſtate of recovery, and there were many remiſſions. But numbers, inſtead of being relieved, were greatly debilitated and depreſſed by profuſe ſweats in the night. Perſpiration kept up twenty-four hours procured no remiſſion to ſome; in others a profuſe moiſture was diffuſed all over, and on feeling the pulſe, a diſagreeable ſenſation was impreſſed on the fingers; and this, though not ſo ſtrong, was perceptible in all, eſpecially during perſpiration, or cold, clammy, and uncomfortable ſweats. Many paſſed the night very ill, either from there being no remiſſion of the ſymptoms, or from exacerbations, or irregular paroxyſms, or from perſpiration and inquietude.—The rigours held ſome four hours, and were followed by violent paroxyſms.—A ſenſation of great cold, while the ſkin was burning hot, and a ſenſation of chillineſs at times, were troubleſome. But the moſt diſtreſſing ſymptoms during the paroxyſms (beſides all the complaints already mentioned, which were now aggravated by

more

more or leſs cough, rendering reſpiration difficult) were, pain of the crown of the head; ſtrictures about the thorax; ſhooting, wandering, or flying pains; pain in the ſcrobiculus cordis ſhooting through to the back, or darting from the right to the left breaſt; pains acroſs the oſſa innominata, of the right buttock, knees, and wriſts; a loſs of ſpeech in the night, a diſtorted face, great inquietude, delirium, and death in one caſe. Both the thorax and abdomen were diſtreſſed as before; a bloody diſcharge from the left ear, the hæmorrhage from the noſe, hæmoptoe, various expectorations of viſcid, ropy ſtuff occurred in ſome caſes, and in others very fœtid pus was diſcharged. The ſtools were ſtill porraceous, and bilious, or watery, or white with high-coloured urine. There was a copious diſcharge of urine, and ſometimes involuntarily. —Some had large eruptions on different parts of the body; raving, and petechiæ.

Great debility, giddineſs, heavineſs, and lightneſs of the head, with great deſpondency and faintneſs, and a bitter taſte in the mouth, were very diſtreſſing during the indiſtinct remiſſion. The limbs were as tired and ſore, (to uſe their phraſe) as if they had come off

a long journey; and ſome felt that peculiar ſenſation of the back and limbs, commonly expreſſed by being aſleep; an inability to ſhut the hands, was complained of; internal ſoreneſs, or, in their words, ſorenеſs in the inſide. The countenance was ſtill flushed, or ſometimes pale, ſallow, wild, and greatly dejected; the palate ſore, and the tongue not only ſo, but red and foul in the middle.

4.—A few recovered; others were now become convaleſcents, a few had remiſſions all day, and ſome cold ſweats. Profuſe perſpiration in many, as heretofore, procured no remiſſion; remiſſions, exacerbations, and paroxyſms, were as irregular as ever, and the two latter were more generally violent. The paroxyſms ſevere with raving, followed by ſweating at midnight, and exacerbations in the morning. And there was alſo remiſſion of pain while the uneaſineſs, heat, and thirſt continued. The head-ache was relieved by ſtools. The moſt urgent ſymptoms were frequent ſhivering, alternate heats and chills, vomiting; the paroxyſms being ſtill introduced by ſhivering, and exacerbations by languor, and heat in the head. In violent paroxyſms, the eyes were prominent: theſe paroxyſms were ſometimes preceded by cough, and pain in

the breaſt; the cough in many caſes was dry and urgent, and increaſed the belly-ache.

The pain was moſt vehement in parts which had been formerly hurt, particularly about the clavicles; and palpitation at the heart* occurred. The head, eyes, ears, countenance, throat, thorax, and abdomen were ſtill affected as at firſt; and in ſome caſes without any remiſſion; the cough was ſometimes attended with difficult reſpiration and tremours. The pains were as various and numerous as before, accompanied with tinnitus aurium. The various diſcharges and evacuations, with expectoration of brown thick ſtuff, continued, and the diarrhœa with faintneſs—worms were voided by ſtool. Some had cold ſweats in the night, an interrupted reſpiration, and a ſenſation of creeping and waſting of the fleſh. The hæmorrhage from the noſe increaſed the giddineſs; an abſceſs which began to form on the neck, before the fever commenced, ſuppurated kindly, and after being laid open diſcharged good matter freely. The urine ſmelled very ſtrong, and the patients were not refreſhed nor relieved

* The patient was ſubject at other times to this ſymptom.

by ſleep. A green matter was diſcharged from bliſtered parts, raving was common, and many had petechiæ. To the ſame ſymptoms which prevailed during the remiſſions on the preceding days, were added tenſion, momentary partial ſweats, depreſſion, breathing through the noſe, loſs of taſte, univerſal debility and ſoreneſs; and the head-ache and cough were increaſed by getting out of bed, and ſitting up.

There was no alteration for the better in the countenance, and the tongue in ſome was very foul and much enlarged.

5.—Some recovered, numbers began to recover, others had remiſſions, and many had none. Violent exacerbations and paroxyſms were more frequent. Remiſſions were ſtill introduced by perſpiration or ſtools; many paſſed the night ill from rigours, head-ache, various pains, urgent cough, ſweating, inquietude and wandering; ſhivering for two hours, or chilline ſs, or alternate heats and chills introduced the paroxyſms, which were attended with all the variety and ſeverity of pain, cough, and laborious reſpiration hitherto mentioned, and likewiſe with retching, belly-ache, conſtipations in ſome, and in others diarrhœa; beſides inflammation of the throat, and pain of the neck, there was pain of the

right ſide of the head, eyes and neck, which ſhot through to the left temple, on turning the head round; violent pains of the left ear and ſide of the head, dimneſs of ſight at times, nervous pains, to which the patient was ſubject, and tremors. Some were chilly at times, others were ſo all day.—Diſagreeable reſpiration, loſs of ſpeech, muttering and ſinging inarticulately, a ghaſtly countenance, and death in one caſe.—Some lay contracted on one ſide:—the evacuations were little altered; either colliquative ſweats, a reeking moiſture, or partial profuſe ſweats continued:—blood and pus, or pus alone, were ſpit up; the hæmorrhage at the noſe, bilious vomitings, porraceous and watery ſtools continued; and ſome voided ſtools mixed with blood and matteer; the angry eruptions about the mouth extended up to the noſe; an itch-like eruption ſpread over the body; petechiæ were very numerous; the expectoration of blood and pus, and of pure pus, continued likewiſe, and the gelatinous diſcharge from bliſters.

All the diſtreſſing ſymptoms before taken notice of during the imperfect remiſſions ſtill prevailed, together with anxiety and reſtleſsneſs.

The countenance and tongue had as various

appearances as formerly, and the teeth began to be covered with ſordes.

6.—A reſtleſs, unquiet night; there was continual chilline ſs, vomiting, and purging, in ſome caſes, and in others ſneezing preceded the paroxyſms, which were in ſome caſes brought on by being wet; and were ſtill accompanied with pains and other complaints of the head, eyes, ears, throat, abdomen, loins, and extremities; a very urgent cough, which occaſioned ſickneſs at the ſtomach; the head and abdomen were more diſturbed than ever, but many thought themſelves better at times. Some complained of the belly-ache, accompanied with ſwelling and tenſion of the abdomen, pain all down the ſpine, pain of the ankles after profuſe ſweating, a ſenſation of hollowneſs in the breaſt, and a ſighing kind of reſpiration; tremors, ſpaſms, delirium, petechiæ, and perfect mania.

The evacuations by the ſkin, vomiting, ſtool, and expectoration, and the eruptions, with the appearances of the countenance, and of the tongue, were as various as ever; beſides, the countenance was now ſooty in ſome caſes, and the lips were very foul; the tongue was rough, ſlimy, and black on each ſide.

In a caſe with vomica, the breath was very offenſive, and there was great thirſt though the ſkin was quite cool.

The ſame diſagreeable ſymptoms prevailed during the remiſſion as before. Some were arriving at a ſtate of recovery, ſome advancing in it, and a few recovered.

7.—A bad night from heat, thirſt, ſweating, head-ache, all the variety of pains, dyſpnœa, and cough, hitherto mentioned. In ſome caſes the ſymptoms as at the beginning continued:—the head, eyes, throat, ſtomach, and inteſtines, were ſtill much diſordered; heat about the head, pain down the whole ſpine, pain about the os pubis; the part of the ſide in which there was excruciating pain, was ſwelled and tenſe. Shivering ſtill was frequent; a worm was voided by the noſe; relapſes with head-ache, the alæ of the noſe were diſtended; ſome drank often and greedily, looked frequently at their fingers, were agitated with ſtarting and tremors, continual wandering, raving, effuſion of tears, involuntary diſcharge of the fæces, and mania, and theſe ſymptoms terminated in death. Expectoration had the ſame appearances as uſual, and was not general. There were numerous

eruptions of various kinds; ſome like the ſtinging of nettles, but the itch-like eruptions were the moſt general, and the moſt troubleſome; petechiæ were obſerved—the tongue had various appearances, and trembled on putting it out, and the countenance was much diſeaſed.

The remiſſions were attended with the ſame train of ſymptoms as uſual—ſome recovered, and numbers were recovering.

8.—The ſick reſted ill from ſhivering, headache, whimſical dreams, raving, ſtarting, working with the hands, oppreſſion and ſoreneſs at the præcordia, and a ſhort, laborious reſpiration, while the patient thought himſelf well. Rigours of four hours continuance introduced paroxyſms, during which moſt of the violent ſymptoms already mentioned ſtill haraſſed the patients. In ſome caſes, there was no remiſſion for twenty-four hours. Neither the head, thorax, nor abdomen were relieved. Univerſal pain, uneaſineſs, anxiety, and inquietude were frequent.—One became ſcorbutic. The bliſtered parts, the noſe and tongue, were very ſore. The face was ſqualid, the noſe contracted, continual raving was not uncommon, and ſome were even ma-

niacal; ſome lay on their backs with a ghaſtly countenance; the reſpiration was very laborious, with a rattling in the throat; petechiæ were ſtill obſerved, coſtiveneſs was very obſtinate, white frothy ſtools with much flatus, were voided by the aſſiſtance of clyſters. In ſome caſes the expectoration was free and laudable—in many the reverſe was obſerved. Previous to the cough which brought on the hæmoptoe, there was a ſenſe of great weight about the præcordia; and after the hæmoptoe a ſenſation of great heat remained in the ſame parts. Hæmorrhoides and a prolapſus ani were troubleſome to a few patients.

The countenances, eruptions, tongue, thirſt, the ſtate of the ſkin and pulſe varied as uſual, as alſo did the remiſſions, and the number of thoſe who recovered.

9.—The patients were very reſtleſs in the night, and troubled with dyſuria; their ſleep was not refreſhing; ſhivering, or alternate chills and heats, very frequently introduced the paroxyſms; but in ſome caſes they were preceded by a ſtiffneſs of the neck, or an obtuſe pain of the head, with ſickneſs at, and pain of the ſtomach, and bilious vomiting, were more violent than ever. Some were deaf,

others afflicted with giddineſs in the head, which was alſo very much diſturbed with pain, as were the thorax, abdomen, loins, and extremities; univerſal pains about the joints, urgent cough, coſtiveneſs, and diarrhœa were ſtill frequent; prolapſus ani, and much heat about the anus. Some had a dyſentery, and great debility, eſpecially of the loins; the voice became rough, the eyes were very much affected, and ſometimes conſtantly ſhut, unleſs when the patient was rouſed. A few were turbulent and unruly, and in ſome were obſerved loſs of ſpeech; pulſe hardly perceptible, and a turning up and rolling of the eyes —two died. Some complained of numbneſs, or want of feeling; hectic heats were diſtreſſing, very offenſive pus mixed with blood was expectorated, as was alſo, in ſome inſtances, an exceeding viſcid brown ſtuff.— The eruption about the mouth and noſe ſuppurated, and beganto dry; and the itch-like eruption ſcaled off. The countenance continued to be very much diſeaſed, as well as the tongue, which in ſome caſes was very black, much enlarged, ſtiff, and very painful; in others it ſwelled much, and was chopt, and the teeth were covered with ſordes. Many petechiæ were ſtill obſerved.

Some

Some now recovered, and many were recovering.

10.—Inquietude, univerſal uneaſineſs, delirium, and ſhivering were ſtill frequent. The head, thorax, abdomen, loins, extremities, and particularly the joints, were ſtill much and variouſly afflicted, and the pains in thoſe parts exaſperated as much as ever by the cough.—Great hoarſeneſs, and a difficulty and pain in ſpeaking, aroſe from an enlarged black tongue, and parched ſore mouth and throat: ſome lay on their back, with the mouth open. Tremors and ſtartings were diſtreſſing, and petechiæ of different ſhapes and ſizes, with other eruptions of various kinds, were ſtill obſervable; in one, they ſpread at the baſe and became livid. The ſallow and much diſeaſed countenance ſtill continued; the tongue and teeth were very foul and black, expectoration was more general; the worſt ſpecies of which was very yellow and very fetid.

Beſides the train of ſymptoms already mentioned, which accompanied the remiſſions, there was a ſenſation as if cold water had been poured on the loins, or down the anterior parts of the thighs. The convaleſcents ga-

thered ſtrength very ſlowly; but ſome recovered.

11.—Many paſſed the night very ill, from violent paroxyſms and exacerbations, during which the body was afflicted as uſual:—rheumatic pains were very common; ſome were delirious, with a pulſe hardly perceptible; and ſome died. Relapſes introduced by chillineſs were frequent, and colliquative ſweats with ſickneſs at ſtomach and retching, very diſtreſſing. The blood was in a diſſolved ſtate; but a few drops of blood from the right noſtril, greatly relieved the head in one caſe. Involuntary effuſion of tears, and expectoration continued. Coſtiveneſs was very troubleſome. There was little alteration on the countenance, throat, tongue, and teeth; only the pellicle began to caſt off from the tongue. The eruptions continued. Some convaleſcents were coſtive—others had a diarrhœa. Moſt of them complained of uneaſineſs, heavineſs of the head, giddineſs, deafneſs, languor, and debility.—Some recovered.

12.—Inquietude, cough, and the uſual pains diſtreſſed many in the night; as did alſo alternate chillineſs, and profuſe ſweats, and great expectoration, which very much debi-

litated the ſick. Chilline ſs, or alternate chills and heats, ſtill introduced paroxyſms with vomiting and delirium. Exacerbations were very violent, and relapſes frequent. Pains in every part, as well as the uſual complaints about the head and throat, bitter taſte in the mouth, ſickneſs in the ſtomach, and an uneaſy ſenſation, retching, diarrhœa, coſtiveneſs, ſuppreſſion of urine, and deſpondency were frequent. Some were yet troubled with partial and momentary ſweats. The various eruptions, appearances of the countenance, tongue, teeth, throat, and expectoration were not altered for the better. Hard lumps were voided by the aid of clyſters; and in ſome white ſpecks were obſerved on the bliſtered parts: petechiæ ſtill appeared.

Thoſe who had ſhort and uncertain remiſſions ſtill complained of thoſe ſymptoms already mentioned; as did the convaleſcents; and of them it is remarkable, that they often denied their having had any ſleep, though they ſlept well.—Some recovered.

13.—Chilline ſs at times; relapſes, with nauſea, and bitter taſte in the mouth; paroxyſms, and exacerbations of all the various pains, and concomitant ſymptoms already

mentioned, were yet frequent, with what the patients called aching of their bones. Coſtiveneſs, diarrhœa, univerſal debility, eſpecially of the joints, and ſoreneſs, giddineſs, pain of the right ear, and depreſſion, were prevalent. Some were become extremely thin; and numbers were haraſſed with the itching eruption. Petechiæ and remiſſions were accompanied with the uſual ſymptoms. The tongue was red and very ſore, when the pellicle caſt off.

Many of the convaleſcents were feeble and peeviſh. Great difference was always perceptible in the pulſe, thirſt, and ſtate of the ſkin. —Some recovered.

14.—Many of the patients had reſtleſs nights from paroxyſms of head-ache, and ſevere exacerbations of the various pains and cough: but the rheumatic pains, hoarſeneſs, ſore throat, and cough were moſt frequent and violent in the cold winter months*. Relapſes, chillineſs, bitter taſte in the mouth, ſickneſs at ſtomach, giddineſs, heavineſs, great debility, languor and depreſſion were diſtreſſing. There was a diſcharge from, and alſo a pain in

* The fever continued two years in the ſhip.

in the right ear; a free expectoration in ſome caſes only; whenever the pellicle caſt off from the tongue, another began to form immediately; coſtiveneſs, and diarrhœa continued; there were ſtill petechiæ and other eruptions, and a more florid appearance, without that itching formerly mentioned. The convaleſcents complained of chillineſs. Some were ſtill inſenſible and delirious, and ſome recovered.

15.—Many paſſed an indifferent night from languor and head-ache. Numbers were not relieved, but very faint after perſpiration in the night; relapſe with ſhivering, chillineſs, ſickneſs at ſtomach, violent paroxyſms or exacerbations, with delirium, and in the afternoon three drops of blood from the noſe; tremors of the hand, petechiæ, pains in the toes, but eſpecially the left; univerſal ſoreneſs and debility, ſore throat and depreſſion. The eyes were inflamed in ſome caſes, and in others ſore and painful; the diſcharge from the ear was leſs, but ſtill troubleſome; coſtiveneſs and piles were obſerved.

The tongue was foul in the morning after ſleep, and thoſe who had remiſſions, as well

as the convaleſcents, were fatigued with the uſual ſymptoms.—Some recovered.

16.—There was debility and faintneſs after profuſe ſweats, and ſenſation of coldneſs while the ſkin was very hot. Irregular paroxyſms and exacerbations; alternate chills and heats, relapſes, nauſea, head-ache, giddineſs, univerſal pains, eſpecially about the præcordia, and about the loins, knees, and ankles: inceſſant cough, great anxiety, and ghaſtly countenance, were frequent ſymptoms; ſome ſpoke very indiſtinctly, groaned, and the tongue was black, yet they thought themſelves better. Petechiæ, diarrhœa, coſtiveneſs, ear-ache, and the itching eruption, remained; the tongue was much diſeaſed, and the teeth were foul.

The ſick recovered very ſlowly, but ſome entirely.

17.—Some paſſed the night ill from urgent cough, various pains, and from heat and inquietude; deſpondency and groundleſs apprehenſions diſturbed others; the remiſſion of the cough, pain of the toes, relapſes, chillineſs, or ſlight rigours, were ſucceeded by head-ache, ear-ache, pain about the breaſts, and uneaſineſs of the ſtomach, giddineſs,

dineſs, debility, depreſſion, tremors of the hand, numbneſs of the lower extremities, coſtiveneſs, a laudable expectoration. Thick urine was voided with pain; in ſome caſes the diſagreeable ſenſation was ſtill impreſſed on the fingers in feeling the pulſe; eruptions continued, there was an angry furuncle on the right cheek, and the tongue was ſtreaked black. The countenance, thirſt, pulſe, and ſtate of the ſkin, differed greatly amongſt the patients.

18.—The ſick paſſed a reſtleſs night from retching, belly-ache, partial ſweats, and various pains already mentioned; the ſides, knees, and toes were moſtly complained of; and a dry, teaſing cough. Relapſes with diarrhœa, head-ache, and various pains. Coſtiveneſs continued, and diarrhœa commenced. The ear-ache, and a watery diſcharge from the ear, was troubleſome. Some had a diſagreeable reeking clammy perſpiration. A black bliſter on the tongue, when the patient awoke in the morning, was a common ſymptom of diſeaſe. The ſick were generally feeble and dejected, ſome of them groaning at times. The eruption began to dry and fall off; the tongue, as well as the countenance,

was yet diſeaſed; the latter ſallow and dejected, and the former of the colour of a pomegranate.

19.—Shivering or chilline ſs, relapſes, ſickneſs at ſtomach, head-ache, ſore throat, pain of the neck, pain and ſwelling of the left ankle, and univerſal pains, were all increaſed by an urgent cough. Languor, dejection, and coſtiveneſs were haraſſing. The countenance was yet diſeaſed: and there was ſomething ſingular about the eyes of one patient, as if he had been afraid when he was ſpoke to. The eruption became livid,* and the tongue had ſtill various appearances: as one black pellicle fell off, another formed very ſlowly on the tongue. Some recovered.

20.—Some paſſed part of the night ill from vomiting and purging. Relapſes; bad taſte of the mouth, ſickneſs at ſtomach, head-ache, ſore throat, cough, giddineſs, and various pains, particularly of the lower extremities; belly-ache, coſtiveneſs, debility, and wandering were very troubleſome, and petechiæ were ſtill obſervable. The eyes were ſunk in the orbits, and the tongue was ſore, chopt, and

* Not the itch-like eruption.

foul; the itch-like eruption was thickeſt on the extremities; there were furuncles on the ſhoulders, and exacerbrations towards night.

The convaleſcents recovered ſlowly.

21.—Head-ache at times; ear-ache, the univerſal pains, belly-ache, diarrhœa, cough, dejection, and inordinate craving were moſt frequent. There was a remiſſion by ſtools and perſpiration. The ear continued to diſcharge, the livid eruption was troubleſome; the countenance was yet diſeaſed, and the tongue foul, ſore, and had an uncommon appearance; and the convaleſcents were very languid, and recovered ſlowly.

22.—Sickneſs at ſtomach, head-ache, giddineſs, belly-ache, diarrhœa, ſcalding and high-coloured urine, cough, dyſpnea, debility, univerſal pains, eſpecially of the upper extremities, were the ſymptoms moſt complained of. There was an unnatural motion of the head and hands, and the tongue was ſtill ſore.

23.—Some paſſed a bad night from belly-ache and diarrhœa. Rheumatic pains, ear-ache, cough, the itch-like eruption, debility, languor, and thirſt were troubleſome. The

tongue was dry, but the expectoration was now free and copious.

24.—The head ached, and was confuſed; the eyes watered, the cough was urgent, coſtiveneſs prevailed, and inordinate craving; deſpondency and depreſſion were diſtreſſing; the countenance was much diſeaſed, though the patient complained little; the mouth and tongue were foul; the thirſt, pulſe, and ſtate of the ſkin varied as uſual: one became ſcorbutic: convaleſcents recovered ſlowly.

25.—Retching to vomit, head-ache, ear-ache, wandering pains, debility, tenſion of the abdomen, and coſtiveneſs; an urgent cough haraſſed the ſick—one became ſcorbutic. The tongue was ſtill dry and foul.

26.—Some of the ſick paſſed an indifferent night. Retching, cough with pain, and ſoreneſs about the breaſt, ear-ache, and proſtration of ſtrength and ſpirits, but eſpecially weakneſs of the loins, were the moſt frequent ſymptoms.

27.—Head-ache, coſtiveneſs, pain and ſoreneſs of the abdomen, ſickneſs and languor from ſitting up in the hammac, cough, debility, and deſpondency were yet diſtreſſing; the

eyes were glaſſy, and the tongue was covered at times with a ſlimy mucus.

28.—A very bad night from inquietude:—ſome were languid and depreſſed, and the countenance was yet wild; many of the convaleſcents denied that they ſlept, and the furuncles were not quite healed.

29.—Head-ache, belly-ache, diarrhœa, languor, and the itch-like eruptions, eſpecially about the thighs, were very troubleſome. The tongue had the pomegranate-like appearance.

30.—Some paſſed the night ill from pain and ſickneſs at ſtomach; others from ear-ache, head-ache, deafneſs, or coſtiveneſs. Though the patient thought himſelf pretty well, the countenance was yet diſeaſed. The right ſide of the ſcrotum of one of the convaleſcents, appeared excoriated.

31.—Relapſe; head-ache at times, ear-ache, pain of the ſide, belly-ache, a diarrhœa and craving were obſerved. The ſkin was yet ſallow, but the lips were beginning to recover their natural appearance.

32.—Wandering and delirium in the night: chilline ſs, head-ache, pain of the ſide, di-

arrhœa, and depreſſion continued. The tongue was foul.

33.—Severe head-ache in the morning, a bad taſte in the mouth, and an expectoration of ſomething diſagreeable. Univerſal pains and ſoreneſs, but eſpecially of the ſide and breaſt, and coſtiveneſs prevailed. The countenance was yet wild.

34.—A paroxyſm in the night, ear-ache, coſtiveneſs, and diarrhœa ſtill obſervable.

35.—Bad taſte of the mouth, belly-ache, coſtiveneſs, diarrhœa, dyſenteric ſymptoms ever ſince they were laſt mentioned, and debility were frequent.

36.—Head-ache, cough, coſtiveneſs, and a brown tongue, were now the moſt obvious ſymptoms.

37.—Pains of the hips and cough were urgent in the night, but the expectoration was eaſy and copious; univerſal ſoreneſs and languor were diſtreſſing. One was very louſy, and ſeveral had been ſo.

38.—Cough and ſlight wandering in the night.

39.—Head-ache in the night prevented reſt; cough, and expectoration, wandering, diarrhœa, haraſſed others; the countenance

was wild:—one, when interrogated, ſtarted up ſuddenly, and exclaimed in a loud tone of voice, that he was well. His legs and feet had been cold, he ſaid, twenty-four hours.

40.—The night paſſed ill from raving and inquietude; one patient was greatly emaciated, and louſy. One convaleſcent was coſtive.

43.—The coſtiveneſs continued, and the itching eruption on the thighs.

45.—Sent the coſtive patient to ſick quarters for change of air and milk diet.—The patient with eruptions was recovering, and ſent to ſick quarters the 48th day of his illneſs; but he had frequent relapſes during that time. There was one man who did not recover until the 56th day of his illneſs*.

* This deſcription is the more valuable, becauſe it is collected from all the different methods of treating the fever.

SECTION III.

OBSERVATIONS *on the preceding* DESCRIPTION.

THE circumſtances in the preceding deſcription, which mark the apparent difference between ſhip fever and the fever deſcribed in our Phyſical Journal, are as follow:

1. The long continuance of ſhip fever on board.

2. The great length of time to which it ran in many caſes.

3. The relapſes which many patients ſuffered before they recovered.

4. The frequent relapſes after a perfect recovery. And

5. The great variety of eruptions which accompanied the ſhip fever, particularly petechiæ.

Could the firſt of thoſe circumſtances proceed from any other cauſe than the virulence of the infection repeatedly brought on board? of the nature of which, or of the manner of its operating on the ſyſtem to produce ſuch variety of ſymptoms, I am entirely

ignorant—though its progreſs and effects are very evident.

Does no' the ſecond originate from the patient continuing, while in a feeble ſtate, to live under the influence of the virulent infection?

And do not the third and fourth proceed from the ſame cauſe?

Do not the eruptions depend on the conſtitution of the patient?—even petechiæ, which frequently appeared with the other eruptions, and ſeem to be, more generally, a concomitant of ſhip fever, when it is treated without bark, as, for want of a proper ſupply of that medicine, we were obliged to do,—and as others do from prejudice, and erroneous opinions.

Whether in thoſe queries are comprehended the cauſes of the circumſtances thus marking the difference between the ſhip and remitting fever, is perhaps of little moment; it is ſufficient that their exiſtence indicatesa virulent infection, and the conſequent neceſſity there is for the utmoſt exertion of human ſkill to ſubdue it, or at leaſt to render it as mild as the nature of things will admit; and it is one conſolation, that, differ as they may in appearance, they are to be cured by the ſame means, viz. Bark.

CHAP. VI.

SECTION I.

OBSERVATIONS ON REMEDIES.

BEING convinced by experience that Peruvian bark alone could be depended on in the cure of fever in hot climates, I could not conceive, notwithſtanding the many claſſes of fever mentioned by authors, and the various methods of cure they recommend, that the ſhip fever in America, when it appeared on board the Juno, differed ſo materially from the fever I had formerly ſucceſsfully managed on the coaſt of Africa, and in the Weſt-Indies,† as to render my treatment of the one improper for the other. I therefore reſolved, after the uſe of moderate evacuations, to place my dependence on the bark;

† See the Phyſical Journal, kept on board his Majeſty's ſhip Rainbow, during three voyages to the coaſt of Africa and the Weſt-Indies, in the years 1772, 1773, and 1774. To which is prefixed a particular account of the remitting fever on board the Weaſel, on that coaſt, in 1769. *Lond.* 1777, printed for John Murray.

bark; and this reſolution I adhered to as long as my ſtock of bark would permit me, which was until the end of December, 1776.—Afterwards it was in particular caſes only that I could adminiſter it.* That the ſucceſs of this practice juſtified my reſolution, will appear from the facts hereafter ſtated.

But the advocates for camphire, antimony, bliſters, &c. may probably deny that I wholly depended on bark, ſeeing I frequently joined one or other of thoſe along with it.† This argument ſeems at firſt ſight to have weight; but will avail them little if the following circumſtances are duly conſidered.

Firſt—Until a very ſhort time before the marine died on the 13th of October, I was neither aware that we had contracted infection, nor that the patient was dangerouſly ill; he therefore got no bark.

Second—Seeing the men were daily ſeized with fever; and reflecting that many of the people might not only be infected, but that

* When we arrived at New-York, bark was a guinea per pound—a price ſufficient to tempt the ſellers to adulterate it, and to prevent ſurgeons of ſhips from purchaſing it.

† See Caſe I.

it might be a long and difficult taſk to ſubdue the infection, I joined the other medicines with the bark, more with a view to make it hold out, than that they would render it more efficacious.—The tartar emetic was moſt frequently joined with it, as the moſt convenient evacuant; becauſe it neither added to the bulk of the doſe, nor rendered it more nauſeous. That evacuations, ſecretions, and excretions muſt be duly preſerved, whatever the medicines are on which we depend, is indiſputable.—But,

Third—Should they ſtill retain their opinion, I refer them to the caſes and the tables which ſhew the events of patients differently treated. Further, if they exclude bark, I challenge any other mode of practice whatever, and will demonſtrate its inferior ſucceſs to the bark method.

Bliſters, applied in the beginning of the fever, carried it entirely off in may caſes,* eſpecially if they were applied on account of head-ache,—otherwiſe they produced little or no

* This is agreeable to what Dr. Lind has ſaid of Bliſters, in his Diſſertation on Fevers and Infection.

no effect, either by ſtimulation, or the ſubſequent diſcharge.*

SECTION II.

METHOD OF TREATMENT WITH BARK.

BEING in ſo high Northern latitudes, I imagined that the ſick in the beginning of the fever would have received benefit by taking away a little blood; but from repeated trials, I found I was miſtaken: for though the pulſe and other ſymptoms ſeemed to indicate the neceſſity of diminiſhing its quantity, ſcarcely one patient could bear the loſs of a few ounces, without either becoming languid or faint, and complaining more afterwards of debility than other patients. Thus I was taught to withhold the lancet; and am now thoroughly convinced that it will not be neceſſary to let blood in any one caſe of a hundred of ſhip fever.—The appearance of the

* On this head I differ from that eminent Phyſician, who reſts the ſole benefit derived from bliſters, on the diſcharge kept up from the part.

blood that was taken away, has already been mentioned in the Diary of the Sick Liſt. But very little information is to be had from thence.

I therefore began generally with a vomit of pulv. ipecac. gr. v. and ſometimes tart. emet. gr. ſs. which was repeated every half hour, until it operated—either of which was wrought off in the common way, with warm water,* and in the evening gave one of the following ſudorifics, and ſage or mint tea, or barley-water, to drink after it, through the night.

℞ Sal C. C. gr. v.
Opii, gr. ſs. fiat bolus.
Vel Tart. emet. gr. i.
Opii, gr. ſs. fiat bolus, hora ſomni deglutiendus.
Vel Eſſent. Antim. Huxham. gut. xv—xl
Tinct. Theb. gut. xv—xxx ſecundum ægri ætatem,
Aq. ſimp. ℥i. ſs.
Syr. com. q. ſ. fiat hauſtus, hora ſomni ſumendus.

It

* A vomit, when given upon the firſt appearance of chillineſs or ſhivering, entirely cured numbers of patients; as Dr. Lind alſo found, and mentions.

It was ſeldom thought neceſſary to repeat the vomit, in the courſe of the fever.

If blood was taken away in the morning, the emetic was preſcribed a few hours after, and the ſudorific at bed-time. Otherwiſe, when the patients complained in the afternoon, and blood was taken from them, the ſudorific only was adminiſtered that night, and the emetic next morning.

Unleſs that procured them ſeveral copious ſtools, within a few hours after its operation, I ordered

℞ Sal. cath. amar. ʒi.
Cryſtal. Tart. pulv. ʒij.
Aq. ſimp. bullientis, ℥iv. fiat ſolutio, et adhuc tepida, bibenda; ac poſtea, ad libitum, pulmentario tenui utantur.

But in ſome caſes the cathartic ſolution was divided into four parts, and Cort. Peruv. pulv. ʒi. adminiſtered with each every hour, until it was all taken. At night the following draught was frequently preſcribed.

℞ Tinct. Cort. Per. Huxham. ʒiij.
—— Serp. Virg. ʒi.
——Theb. gut. x—xxx
Aq. ſimp. ʒi. ſs.
Syr. com. q. ſ. fiat hauſtus.

And in ſeveral caſes, when the head-ach was violent, a bliſter was applied to the back.

Next day, being the third or fourth of the patients' complaining, I preſcribed the bark.

℞ Pul. Cort. Peruv. ʒi.
Aq. ſimp. ℥. iſs. fiat hauſtus; ſed, ut viſum, Elix. Vit. gut. vi.—vel Tinct. Theb. gut. xx. vel vini alb. cochlear un. Sometimes the doſe was increaſed to ʒii.

This draught was taken every hour, or every two, three or four hours, as was thought proper; but two ounces of the following decoction with other medicines was more generally ordered, after the ſame manner.

℞ Cort. Peruv. craſſ. pulv. ℥iv.
Eleuther. craſſ. pulv. ℥ij.
Aq. ſimp. cong. iij. coque ad cong. ij. et cola.

But the bark was always, for the worſt caſes, preſcribed in ſubſtance.—In caſes of conſtipation I joined either from ten to twenty grains of rhubarb, or more frequently ſal. cath. amar. ʒij—℥ſs; and ſometimes tart. emet. gr. ¼.—gr. ſs. When violent pains were complained of at night, I ordered the following anodyne bolus.

℞ Camphor.

℞ Camphor. gr. iv.

Opii, gr. ſs—gr. i. ut viſum, f. bol.

And for the convaleſcents, I ordered an opiate regularly every night.

The drink was either one of thoſe I have already mentioned, or very thin gruel; and thoſe were ſometimes acidulated, and ſometimes had nitre joined to them.—Clyſters and pediluvia were made uſe of as occaſion required.

This was the manner in which I treated the ſick until they recovered; but in the mean time I allowed to thoſe patients, whom I thought the propereſt objects, a little wine from time to time; and when they arrived at a convaleſcent ſtate, their diet was the moſt proper that circumſtances would admit.

I muſt, however, acknowledge, that I was much vexed to find the fever was far more obſtinate, and more difficult to cure, than it was on board the Rainbow.

Query—Did this proceed from the difference of climate—of the conſtitution of the patients—or of the nature of the infection? From the virulence of the infection only.

And what was no leſs perplexing, the pa-

tients would often relapſe from very ſlight cauſes, when they were nearly recovered.

But the method of treating this diſeaſe will be more fully explained in the following caſes.

SECTION III.

CASES OF THE FEVER TREATED WITH BARK.

CASE I.

THO. Lawſon, a marine, aged about thirty, was ſeized in the morning of the 21ſt of October with ſhivering, head-ache, ſickneſs at ſtomach, and univerſal pains; and complained in the afternoon. The pulſe was then ſmall and quick.—Emet. ſtatim cepit; et poſtea, potione diluente utitur.

2. The vomit operated well, and he ſweated in the night, and ſeemed a little relieved. Sal. cath. amar. ℥i. dedi:—4 PM a ſevere paroxyſm came on, with ſhivering for four hours. Sudorificum h. ſ. deglutiit, et veſicatorium inter ſcapulas fuit admotum.

3. He paſſed the night very ill from great heat and inquietude. No perſpiration. Decoct. cort. Peruv. ℥ij. Tart. emet. gr. ſs. ſexies in die cepit.—4 P M he became chilly again for a little, and thought himſelf better, though he complained of pain about his eyes, and was much dejected. The pulſe was ſmall, and quick, and petechiæ appeared upon him.

4. Perſpiration was perceived on him at midnight; and early A M the head-ache, and pain about his eyes increaſed, the countenance was much diſeaſed, and bloated; he raved; the ſkin was hot, and he was thirſty. Medicinam ut heri cepit. At 2 P M a ſevere exacerbation began: he had three ſtools, and a ſcalding from the bliſter. Camphor. gr. v. boli forma, h. ſ. cepit ac pediluvio utitur.

5. He ſweated a little, but paſſed a very indifferent night from inquietude, and was no way relieved, except of the ſcalding. Decoctum cum Tart. emet. et tinct. ſerp. Virg. ℥ſs. adhuc cepit.—etiamque h. ſ. bolum camphor. ſumpſit.—In the afternoon he had leſs pain, the pulſe was firmer, but the petechiæ were more numerous.

6. He became eaſier after reſting the firſt part of the night, but the pulſe was ſtill quick

and hard. Omni modo ut heri præſcripſi. Between three and four P M a paroxyſm came on, which affected the head much; diarrhœa and belly-ache at times.

7. At midnight the fever remitted, during which the head-ache, heat and thirſt were urgent, and he was haraſſed with cough. Decoct. cort. ʒij. pulv. ſal. nitr. gr. x. miſ. quinquies in die cepit, et anod. h. ſ.—veſicatorium renovatum fuit. He was chilly at times through the day, and purged frequently.

8. Head-ache, great depreſſion, giddineſs and thirſt were troubleſome; the tongue ſeemed ſtriped red and white, and a little enlarged.—Camp. gr. v. quartaque hora præſcripſi cum potione nitroſa.

9. He paſſed the firſt part of the night ill from inquietude. A M he had an unrefreſhing ſleep, and afterwards rambled much. His voice became very rough, his tongue was black, the teeth covered with ſordes, and he loſt his taſte; the countenance was ſallow, and much bloated, his eyes exceeding dull, the pulſe languid, and the ſkin dry and hot; but he did not complain.—Pulv. cort. Peruv. ʒi. Tart. em. gr. ¼. vin. rub. Oport. ʒiſs. tinct. ſerp. ʒi. quaque hora præſcripſi. P M he

ſpoke wildly, and the tongue was black, but the pulſe was firmer, and the voice natural. His body was open.

10. There was a remiſſion all night, and towards morning he ſlept, having afterwards a copious ſtool. In the afternoon he was much better, and recovered his taſte, and complained of univerſal pains. Ut heri medic. cepit, ac camph. gr. v. h. ſ.

11. He complained of univerſal ſoreneſs, and took his medicines with reluctancy. P M his head ached at times, and he was giddy at others,—uneaſy, and deſirous to ſleep; the tongue was clean, but chopt; and he continued better in every reſpect, having had two copious ſtools.—Medicinas tertia quaque hora præſcripſi, ac bolum h. ſ. cum anodyn.—— Diæta tenui ſed nutriente utitur.

12. He perſpired and ſlept in the night, but denied it, and expreſſed a great deſire to ſleep; his tongue was dry, and rather black, with ſordes about the teeth when he awoke. His body was open, and his countenance became lively. White ſpecks appeared on the bliſtered part of the back, which diſcharged freely.—Decoct. cort. Peruv. ʒij. pulv. cort. ʒſs. tart. emet. gr. ¼. quinquies in die cepit, et

aliter ut heri et vin. paux. ſubinde. P M he continued recovering, but complained of a cough, probably from being got on deck while the ſhip was ſmoking.

13. He had a tolerable night, but denied that he ſlept; perſpired freely, and had a copious ſtool: but his bones ached, he ſaid. —Medicinam quater hodie cepit, et anod. h. ſ.

14. He reſted well, his tongue healed and became clean ſlowly, but he was ſenſibly recovering: though he was not quite free of the fever until the 22d. The moſt evident ſymptom of fever about him when he awoke was a black veſicle on his tongue.

He continued to recover until the 30th, when he relapſed with ſhivering and delirium;—perhaps from his bedding being waſhed (without my knowledge) and not thoroughly dried, by his meſſmates, becauſe he was louſy. The ſymptoms moſt urgent were, a pain of his ſide, univerſal pains, a tooth-ache, and frequent chilline ſs; he was gently vomited and purged, and had a bliſter applied to his ſide; the decoction of bark was given after the ſame manner as before, and he continued to recover ſlowly until the 27th, when he was

ſent to ſick quarters at Halifax, for a change of air and diet.

CASE II.

James Jourd, aged about 29, a very irregular fellow, was ſeized the evening of the 28th of October, with ſhivering for four hours, ſickneſs at ſtomach, retching, and ſevere head-ache; which were followed by heat, uneaſineſs, and inquietude. When he complained on the 29th, he looked wild, and was much dejected. Emet. ſtatim; ac hora ſomni ſal. C. C. gr. v. opii gr. ſs. boli forma cepit, ſuperbibendo menthæ infuſionem ad libitum.

2. The emetic, which was five grains of ipecacuanha, purged as well as vomited him; and he ſweat profuſely from the bolus, which relieved his head; but the anxiety continued, and the countenance was much diſeaſed. Dyſenteric ſymptoms were diſtreſſing, and the pulſe was quicker and harder than natural. Decoct. cort. Peruv. ℥ij. quater in die dedi, et anod. h. ſ.—P M he was hot, and looked as if he had been drinking.

3. He paſſed an indifferent night from heat, thirſt and inquietude; but the griping and purging were abated. Decoct. cort. Peruv. ℥iſs. tart. emet. gr. ¼ ut viſum, ſexies in die præſcripſi. P M he thought himſelf better, though he was ſtill very feveriſh.

4. The purging was troubleſome, his ſkin was hot, thirſt frequent, and the pulſe hard.—Decoct. ſine tart. emet. dedi, opii gr. ſs. ut viſum. P M he was better.

5. Thought himſelf relieved, though he was very hot, thirſty, looked bad, and voided porraceous ſtools. Ut heri præſcripſi. P M an hæmorrhage from the noſe, and the purging abated.

6. He had only two ſtools in the night, and reſted well; but his countenance ſtill ſeemed greatly diſeaſed; he was ſick at ſtomach, and retched at times from urgent cough; his tongue was foul, and the thirſt great.—Ut heri præſcripſi et vini pauxillum, vel tinct. cort. bis in die. P M he was free from retching.

7. He was eaſy after a good night, but was ſtill hot and thirſty, and the tongue was duſky in the middle.—Decoct. cort. ℥ij. pulv. cort. ʒſs. tart. emet. gr. ¼. m. quinquies

in die bibit, et op. ut viſum. P M his belly ached a little at times. Camphor. bol. gr. v. opii gr½. h. ſ. Potio fuit diluens et refrigerans.

8. His countenance and tongue were extremely diſeaſed, he perſpired irregularly, his pulſe was rather quick and ſmall, but he complained only of being coſtive.—Pulv. cort. Peruv. ʒi. tinct. cort. ʒij. tart. emet. gr¼. aq. ſimp. ℥iſs. ſyr. com. ʒiſs. miſce: ſecunda quaque hora ſumpſit. Veſicator. inter ſcapulas etiam admovi. P M he was not relieved.

9. He perſpired a little in the night, and he had a ſtool in the morning; the tongue was enlarged, brown, and chopt.—Serpent. Virg. decoct. et cort. Peruv. (Vide Ephemeridem) quarta quaq; h. cepit, et opii gr. i. h. ſ. P M his pulſe was quicker and irregular, but he always ſaid he was better, when his health was inquired after. Had ſeveral ſtools.

10. He had a ſtool, was delirious, and very reſtleſs the firſt part of the night. A M the pulſe was more diſtinct, but weaker, and the ſkin was moderately cool; but he lay on his back, as on the two preceding days, with his mouth wide open, by which means his

tongue and throat were ſo dry, that he could not ſpeak until they were moiſtened, and then ſcarce intelligibly. He felt his bliſters pain him, and was fond of apples, which he had at pleaſure. Omni modo ut heri præſcripſi. P M he had a ſtool; there was a black pellicle on the tongue, the pulſe was irregular and quick; he had frequent ſtartings, was greatly depreſſed, and covered with petechiæ of different ſizes and ſhapes. Pulv. cort. Peruv. ʒij. tart. emet. gr¼. vin. Canar. ℥ij. (et tinct. theb. gut. xx. ut viſum) ſecunda quaque hora ſumpſit.

11. He was much relieved after a good night; he ſpoke, and was in good ſpirits; the pellicle, or rather thick black cruſt, began to caſt off from the tongue, and the pulſe was firmer.—Cort. ut heri pomeridiano cepit. P M a moſt violent exacerbation came on, with deafneſs and an effuſion of tears; neither the mouth nor teeth could be kept clean, the pulſe was very ſmall, and he was coſtive.—Camphor. gr. v. h. ſ. deglutivit. I ſuſpected that his meſſmates had given him grog.

12. A ſlight remiſſion, the pulſe being firmer, and the countenance leſs ghaſtly; he was coſtive, and always ſaid he was better,—

Enema

Enema fuit adhibitum, et decoct. ſerp. Virg. et ſp. C. C. gut. xxxv. quarta quaque hora præſcripſi. P M he had two ſtools, in the firſt there were hard lumps; he coughed and ſpit up with the utmoſt difficulty, a blackiſh and very tenacious ſtuff, but complained of no pain; ſpake clearer, and the pulſe became ſtronger.—Cort. et vin. cepit et camph. gr. vi. h. ſ.

13. He paſſed a good night, and was much relieved; the tongue was very ſore wherever the cruſt appeared. P M the body was open, and the pulſe full and quick.

14. There was a perfect remiſſion after ſleeping and perſpiring freely in the night. The tongue was now much cleaner, but the cruſt ſeparated very ſlowly.—Cort. et vin. ac tart. em. dedi ut heri: diæta tenui et levi utitur. P M his body continued open, and he was cool and eaſy. H. ſ. ut poſtrema nocte.

15. He paſſed a good night, ſweated, and had a ſtool, though he was diſturbed by the ventilator.—Ut heri, et gargariſma utitur. P M a violent paroxyſm, I ſuſpected, was brought on by grog. The countenance was fluſhed, and the eyes much inflamed; the pulſe was

rapid, tremors were diſtreſſing, and he groaned often.

16. He ſlept and had a ſtool in the night; tke ſkin was hot, the pulſe quick and irregular, and he ſpake indiſtinctly; the countenance was much diſeaſed; he was again become a little deaf, and though he thought himſelf better, he was anxious to know if he ſhould recover.—Decoct. cort. ℥ij. pulv. cort. ʒſs. tart. emet. gr¼. miſce; ſexies in die bibit, atq; tinct. theb. ut viſum, et vini paux. ſubinde. P M the tongue was black, the groaning continued, and he was inclined to ſleep. The body was open. Camp. atq; anod. h. ſ. cepit.

17. He had two ſtools, and reſted tolerably in the night; he coughed and expectorated a laudable pus, and could now put out his tongue, which was blackiſh; and though the ſkin was cool, there was a diſagreeable quickneſs in the pulſe. His body was open; and he ate ſome pancake given him by his meſſmates.—Ut heri præſcripſi.

18. He reſted ill from his bones aching, he ſaid, from lying in bed; the tongue had the pomegranate appearance, and the pulſe ſmall and quick. Cort. ut heri, (ſed fine tart.

emet.) et camp. h. ſ. dedi. P M he groaned without pain, perſpired freely, and began to recover his appetite, but ſtill had many petechiæ on him. Anod. h. ſ. ſumpſit.

19. He complained of hunger, after having two ſtools, and paſſing a good night; but one cruſt continued to ſucceed another on his tongue, which gradually became black, though the pulſe was moderate, and the ſkin cool.—Ut heri omni modo.

20. His voice was now become natural, but the tongue was ſore and black.—Corticem adhuc cepit. P M he was hot and uneaſy, I believe from irregularity. Anod. h. ſ. ſumpſit.

21. He was eaſy and cool, after having a ſtool, and perſpiring in the night.—Medicinam ut 18vo. præſcripſi.

22. The tongue cleaned and healed ſlowly. —Ut heri.

23. He continued to recover. Ut heri adhuc.

24. The pulſe became quick, the ſkin was hot, the tongue and mouth were foul, perhaps from irregularity, but he expectorated laudable pus with his cough.—Decoct. et pulv. cort. adhuc, ut 18vo. ſumpſit.

He continued to recover, though ſlowly, until the 29th, when I ſent him to ſick quarters. Towards night he became a little hot. I gave him the bark through the day, and an anodyne at night.

CASE III.

Daniel Wilkins, a marine, aged about 28, a very irregular man, complained the 10th of Oct. 1776, of head-ache and purging.—Emet. ſtatim, ac anod. h. ſ. cepit.

2. Griping was moſt troubleſome.—Sal. cath. amar. ℥i ſs. præſcripſi, et anod. h. ſ. cepit.

3. He complained more of heat, thirſt and head-ache, than of purging; his pulſe was fuller and quicker than natural.—Sal. nitri, gr. x. quater indie, atq; potion. com. dedi.

4. The head-ache was ſtill haraſſing.—Ut heri; ac tinct. cort. Peruv. ʒiij. ſerp. Virg. ʒi. theb. gut. xv. aq. ſimp. ℥i ſs. ſacch. alb. ad gratum ſaporem; fiat mixtura, h. ſ. cepit.

5. He had no complaint. P M his throat was a little inflamed.

6. The inflammation was much the ſame,

the

the uvula was relaxed, and he had no appetite.—Cort. Peruv. decoct. ʒij. elix. vit. gut. v. quater in die ſumat.

7. He was recovering.—Ut heri, bis in die præſcripſi.

8. He returned to duty.

9. He was irregular yeſterday, and relapſed at 2 pm. but did not complain until this day pm. of alternate chills and heats; of ſickneſs at ſtomach, head-ache, univerſal pains, heat, and great thirſt.—Emetic. ſtatim dedi; poſteaq; potione diluenti utitur.

10. The vomit operated upwards, and downwards, but the head-ache continued. Cort. Peruv. decoct. ʒiſs. elix. vitr. gutt. v. quater hodie ſumat. PM he was not relieved.—Tart. emet. gr$\frac{1}{2}$. tinct. theb. gut. xx. h. ſ. cepit.

11. His head-ache remitted in the night.—Ut heri omni modo præſcripſi. A paroxyſm returned at 4 PM with pain of the limbs.

12. The head-ache continued with giddineſs and cough.—Cort. Peruv. decoct. ʒij. tart. gr$\frac{1}{4}$. ut heri ſumat atq; potion. nitros. Veſicat. inter ſcapulas admovi. PM no remiſſion.

13. He was relieved of his complaints, and was easy and cool.

14. On recovery, decoct. ut heri, atq; elix. vit. præscripsi.—From 9 A M to 6 P M he was chilly and giddy.

15. Complained of debility and universal soreness.—Ut heri.

16. On recovery, decoct. atq; elix. vit. adhuc cepit. P M he was irregular.

17. Continued to recover.—Ut heri. At 5 pm. he became chilly, and his head-ache returned. Tart. emet. gr. ss. h. s. cepit.

18. He became easy at midnight.—Decoct. atq; elix. vit. quater in die dedi.

19. He was hot in the night. The itch-like eruption had been troublesome for some time.—Ut heri.

20. He was recovering.—Decoct. et elix. vit. bis in die sumat.—P M a paroxysm came on. Tart. emet. gr. ss. h. s. sumat.

21. About midnight there was a remission, with debility.—Decoct. atq; elix. vit. quater in die sumat. P M sickness at stomach, head-ache, and universal pains returned. Anod. h. s.

22. He rested well the fore part of the night, but complained of weakness, giddiness,

and

and ſickneſs at ſtomach ; his pulſe was quick and feeble. Decoct. ſexies in die dedi. P M no remiſſion, and diarrhœa was troubleſome : —Opii gr.ſs. ut viſum, atq; decoct. præſcripſi: veſicator. inter ſcapulas admovendum, et ſal. C.C. gr. v. opii gr.ſs. h. ſ. ſumendus; ſuperbib. menthæ infuſ. ad libitum.

23. A ſlight remiſſion, though he was diſturbed in the night ; he did not ſweat, but the thirſt continued. Ut heri atq; tart. emet. et decoct. quater in die cepit. P M he was chilly all day, though he was relieved.

24. He complained leſs of his head-ache, but his ſkin was hot, the thirſt urgent, his pulſe quick and ſmall, and he was greatly depreſſed. Ut heri præſcripſi. P M an exacerbation came on, and his head was confuſed and diſturbed.

25. He was not relieved; an urgent cough and thirſt haraſſed him; his tongue was dry and white, and he was very feeble. Pulv. cort. ʒ ſs. et cort. decoct. ʒij. quater in die dedi.

26. He reſted ill from having a bad berth, and complained of much pain and ſoreneſs about his breaſt, eſpecially when he coughed ; but the pulſe was moderate. Linct. emol.

(atq; nit. et tart. emet.) q. n. m. quater in die ſumend. ſuperbib. pulv. cort. ʒi. vin. rub. ʒiſs. fiat hauſtus. PM he vomited twice from the linctus.—Omitted the nitre.

27. He paſſed a good night, having perſpired freely, and had a copious ſtool. A remiſſion of the ſymptoms:—P M a ſlight exacerbation, but he was ſick from ſitting up in his hammac.

28. He had a quiet night, but was very languid, dejected, and looked wild; his body was lax. Rad. ſerp. Virg. contus ʒiſs. aceti lb. iv. coque ut ſint colaturæ lb. ii. cui adde pulv. cort. ʒi. ſyr. ſimp. ʒiv.* coch. ij. quarta quaq; hora capiat, atque vini paux. ſubinde. P M his ſkin was cooler and ſofter, but the pulſe languid, and he was frequently purged. Opii gr. ſs. cepit.

29. He complained of weakneſs and the itching eruption only; but the countenance was much diſeaſed, and his tongue had the pomegranate appearance. Ut heri.—P M no alteration, but he had four ſtools. Pulv. cort. ʒi. tart. emet. gr. ¼. tinct. theb. gut. xx. vin.

* This is a decoction of Dr. Lind's. See his Diſſertation, chap. i. ſect. 2.

alb. ʒij. m. fiat hauſtus, ſecunda quaq; hora ſumend.—pomis libere utitur.

30. He complained only of his bliſter and thirſt, but he ſtill appeared to be much diſordered; the diarrhœa continued, and his pulſe was feeble. P M the diarrhœa ſtill continued, but his tongue was clean; he became ſomewhat deaf.—Anod. h. ſ. cepit.

31. He ſtill looked wild, and was thirſty, craving for different things. Ut heri quarta quaque hora præſcripſi. P M the diarrhœa continued, his lips were regaining their natural colour, but he was otherwiſe quite ſallow. Anod. h. ſ. cepit.

32. The diarrhœa haraſſed him in the night, and he was thirſty. Ut heri atq; opio ut viſum. PM he was much the ſame. Anod. h. ſ. atque camp. gr. vi.

33. He paſſed a tolerable night, and complained little, though he was thirſty, and looked wildly. Ut heri. P M he had four ſtools in the day. Anod. atq; camp. h. ſ. ſumpſit.

34. He continued to look ſallow and wild, and complained of thirſt and deafneſs; his tongue was white. Omni modo ut heri.

PM the diarrhœa was yet troubleſome. Anodynum h. ſ. ut ſupra.

35. He did not ſleep, but was quiet in the night. Ut heri adhuc. PM the diarrhœa continued, and he dozed. Anod. ut 33.

36. He had a good night, and complained of nothing; but his pulſe was feeble, his countenance diſeaſed, and his tongue brown, and he dozed at times. Ut pomeridiano 29ni præſcripſi. PM no alteration. Anod. h. ſ.

37. His cough diſturbed him in the night, and he complained of debility, and of pains in the hips; and expectorated pretty freely. Ut heri, ſed ſine tart. emet. PM he began to look better, but his cough was urgent. Anod. h. ſ. cepit.

38. He paſſed an indifferent night; the cough and expectoration continued. Decoct. ℥ij. pulv. cort. ℈ij. quater in die ſumat; vino etiam adhuc utitur, et anod. h. ſ.

39. The cough and expectoration continued, and he had two ſtools in the night; he raved towards morning, and looked wild:—when aſked how he was? he anſwered, loud—that he was brave, ſtarting up at the ſame time. Omiſſis med. vini paux. ſecunda qua-

que hora dedi. PM he ſaid his feet and legs had been cold the laſt twenty-four hours. Anodynum h. ſ. cepit, et pediluvio utitur.

40. He paſſed a reſtleſs night from inquietude and raving, and he was greatly emaciated and louſy. Ut heri præſcripſi, tertia quaque hora, et ut 38vo præſcripſi quater in die, et pediluv. et anod. h. ſ.

41. He reſted badly from raving, and ſlept am. the expectoration with the cough continued, and his cravings. PM the cough was troubleſome, but his appetite began to return. Ut heri.

42. He had a good night, and perſpired; he looked better, his pulſe was firmer, and his ſkin warm. Ut heri adhuc. PM he continued better.—Anod. h. ſ.

43. He continued to recover, but found the eruption ſtill troubleſome.—Ut 39 præſcripſi.

44. Recovering.—Ut ſupra.

45. He recovered ſlowly.—Ut heri.

46. He continued to recover.—Ut heri.

47. Still recovering.—Ut heri.

48. I ſent him to ſick quarters for the ſame reaſon I had ſent Lawſon and Jourd.

CASE IV.

William Hurd, aged about 25, of a thin habit, was ſeized the 11th of October with head-ache, puking, and univerſal pains. Emetic. ſtatim dedi.

2. He complained much leſs, and the vomiting ceaſed. Sal. cath. amar. ℥i. ſump.

3. His head was ſtill affected, though he ſweated thoſe two nights paſt. Sal. nit. gr. x. quater hodie ſumatur.—Tinct. cort. ʒiij. tinct. ſerp. Virg. ʒi. theb. gut. xii. f. h. ſ. a. h. ſ. ſumendus.

4. He ſlept in the night; but now complained of more head-ache, of pain about his eyes, of heat, thirſt, and of his urine ſmelling ſtrong; his ſkin was dry, and his pulſe quick and ſmall. Cort. Peruv. pulv. ʒi. elix. vit. gut. vi. aq. ſimp. ℥iſs. miſce quater in die ſumendus. P M he was not relieved. Potione ſubacida utitur.

5. He was much relieved after having paſſed a good night; but his head-ache ſtill haraſſed him, and he was feeble. Decoct. cort. Peruv. ℥ij. quater in die præſcripſi.

Diæta ſit tenuis et levis. P M the paroxyſm continued twenty-four hours.

6. On recovery. Ut heri præſcripſi.

7. He complained of weakneſs. Ut 5 medicinam cepit. P M he became hot, thirſty, and felt his head light. Cum decocto ſuo, hora decubandi, tart. emet. gr$\frac{1}{4}$. dedi.

8. There was a remiſſion at midnight. Ut heri decoct. ſumat. P M he complained of weakneſs only.

9. He paſſed a good night, and was eaſy. Decoct. adhuc cepit.

10. He was recovering. Ut heri præſcripſi.

11. He was feeble. Ut ſupra decoct. ſumpſit.

12. He recovered.

CASE V.

John Dance, aged about 30, of a bloated habit, with venereal eruptions, complained, the 12th of October, of head-ache, ſickneſs at ſtomach, univerſal pains, and ſevere gripes. Emet. hodie dedi.

2. His head was ſtill much affected. Cath. hodie cepit. P M tinct. cort. ʒiij. ſerp. Vir.

℥i. theb. gut. xv. aq. ſimp. ℥ſs. ſacch. alb. q. ſ. m. f. h. h. ſ. ſumendus.

3. He was relieved in the night of a pain in and about the left eye, which had affected him, but complained of griping and purging. Pulv. cort. Peruv. ʒi. quater in die aq. ſimp. ℥iſs. dedi. P M he was much better.

4. He was now free from the dyſenteric complaints, and was recovering. Decoct. cort. ut heri præſcripſi.

5. He continued to recover. Ut heri decoct. cepit. P M he became hot and thirſty.

6. He paſſed an indifferent night from fever and head-ache. Ut heri. At 8 pm. he was much relieved; the paroxyſm continued about 12 hours.

7. He ſweated profuſely in the night, and his lower extremities were painful. Ut heri adhuc. P M the perſpiration continued all day, and he found himſelf feeble.

8. He was eaſy, but continued to ſweat. Decoct. atque elix. vit. cepit. At ten this morning a paroxyſm returned, with ſhivering, and he was chilly all day. Tart. emet. gr. ¼. atque. decoctum ſumpſit.

9. At 8 laſt night a remiſſion came on; the forehead ached, and he was giddy. De-

coct. cort. ut ſupra præſcripſi. P M he had an exacerbation of head-ache for three hours.

10. At 7 pm. an exacerbation of head-ache came on. Decoct. cort. atque tart. emet. ſumat. P M the head-ache diſtreſſed him.

11. The head-ache remitted at eight laſt night, and he continued eaſy after a good night. Decoct. adhuc quater indies ſumat.

12. He was recovering. Ut heri. He thought himſelf a little chilly in the forenoon, but had no fever on him.

13. He returned to duty.

CASE VI.

William Folkes, aged about 32, was ſeized the evening of the 13th of October, with chillineſs, which was ſucceeded by a hot fit, and profuſe ſweat—he again became chilly, and complained of head-ache, lumbago, and thirſt. His ſkin was hot, and his pulſe quicker than natural. Emet. ſtatim dedi.

2. He complained of head-ache being ſevere, but otherwiſe he was relieved. Sal. cath. am. ʒij. ſumat.

3. He complained of head-ache and thirſt.

Cort. decoct. ℥iſs. elix. vit. gr. vi. quater in die cepit.

4. His head-ache continued. Ut heri. P M his left ear became painful.

5. There was an exacerbation at 8 laſt night, which remitted about noon; but the heat and thirſt continued. Decoct. adhuc cepit.

6. Yeſterday, in the evening, an exacerbation returned, and he became eaſier at midnight. Medicin. adhuc cepit. P M the head-ache was troubleſome at times, particularly the left ſide.

7. The head-ache remitted at midnight. Decoct. quater hodie ſumat. P M the uſual exacerbation returned.

8. His head was ſtill affected, eſpecially towards night. Ut heri.

9. He recovered very ſlowly. Decoct. adhuc præſcripſi. P M he continued to recover, but complained of cough.

10. He was recovering. Ut heri.

11. He recovered.

In four days he relapſed, and was much worſe than before. I treated him as I had done formerly, only that he took the decoction of bark oftener, and ℥ſs. of the powder with every

every doſe. On the 27th day from his being firſt ſeized, he was pretty well recovered, when I ſent him to ſick quarters for the reaſon I did the former patients.

CASE VII.

M. L. aged about 20, who lay in a berth with a ſick meſs-mate, felt a pain of his back for two days, with loſs of appetite, and laſſitude; and was then (Oct. 21.) ſeized with head-ache and ſickneſs at ſtomach—his pulſe was quick, and rather hard. Emet. ſtatim dedi et ſudorif. h. ſ.

2. He found himſelf relieved after perſpiring in the night. Sal. cath. am. ʒi. ſumat, ac ſudorif. h. ſ. repetivi. P M he neglected taking the ſalts, and there was an exacerbation. Veſic. inter ſcap. admov.

3. He complained greatly of head-ache, and was much depreſſed. Sal. cath. ʒi. cryſtal. tart. ʒij. cepit. P M a remiſſion came on.

4. He had a pain, at times, over one or the other of his eyes; he was feeble and dejected, and his pulſe varied. Decoct. cort. ʒij. ſal. nit. gr. x. quater in die cepit. P M there was no alteration.

5. The pain affected the right ſide of the head, eye and neck; and darted through to the left temple, upon turning his head—he was coſtive. Sal. cath. am. ℥ſs. cepit, aliter ut heri. P M the pain continued.

6. His head ached on turning it round. Decoct. atq; elix. vit. gr. xi. quater in die ſumat. P M he complained of more head-ache after drinking a little grog. Pediluv. utit.

7. The head-ache, debility, and dejection ſtill continued. Ut heri.

8. There was no alteration, and he was coſtive. Ut heri atq; cath. leni.

9. He complained much of head-ache at times, and found it preceded by a ſtiffneſs of his neck. Decoct. cort. atq; nit. ſumat quater in die: et vini pauxillum ſubinde.

10. An exacerbation of his head-ache returned at 4 am. without the ſtiff neck. Ut heri, ſed decoct. ſexies atq; tart. emet. gr. ¼. ut viſum, dedi. P M there was a remiſſion at noon, and he was feeble and giddy.

11. He was eaſier, but complained of pains in his joints, and ſickneſs at ſtomach. Decoct. cort. atq; elix. vit. aliter ut 9 præſcripſi.

12. The

12. The ſickneſs continued, with an uneaſy ſenſation about the præcordia, and pain of the neck. Pulv. ipecac. gr. v. dedi. P M he was much relieved by the emetick. Sal. C. C. gr. opii gr. ſs. in boli forma h. ſ. deglutivit.

13. An exacerbation of head-ache returned at midnight, and his joints were feeble. Decoct. ſexies in die ſumat, atq; vin.

14. He complained of heavineſs, giddineſs, debility, and depreſſion. Ut heri. P M an exacerbation of head-ache came on. Anodyn. h. ſ. cepit.

15. He paſſed a bad night from violent head-ache; a ſore throat, (which had been troubleſome for two days before, though he did not mention it) and great depreſſion. Veſic. inter ſcap. admovi, camph. gr. 4, tart. emet. gr$\frac{1}{4}$. boli forma quarta quaque hora deglutiit, ſuperbib. cort. decoct. ℥ij.—aliter ut 9. A M he felt himſelf rather cold; pm. he was relieved.

16. He was hot, thirſty, and coſtive. Pulv. rhæi ʒſs. cepit. P M he was eaſy, but his ſkin was hot, and his pulſe quicker than natural.

17. There was an exacerbation of headache, with heat and thirſt—he was much depreſſed; uneaſy at the ſcrobiculus cordis, and his tongue was ſore and ſtreaked black. * Decoct. acet. rad. ſerp. Virg. cochlear. ij. Ut pro Wilkins 28vo ægrotationis ſuæ quarta quaque hora dedi atq; vini pauxillum. P M his pulſe was quick, irregular, and accompanied with tremours; the ſkin was hot, and impreſſed a diſagreeable ſenſation on the fingers; and he was ſick at ſtomach.

18. He paſſed the night ill with gripes, ſickneſs and retching, though he ſweated. The bliſter diſcharged freely. There was a remiſſion. Pulv. cort. Peruv. ʒi. tart. emet. gr$\frac{1}{4}$. tinc. theb. gut. xv. vin. alb. ʒij. ſecunda quaq; hora dedi. P M he was much griped and coſtive. Sal. cath. am. ʒſs. cepit, being averſe to a clyſter. Vini alb. ʒij. ſecunda quaque hora dedi.

19. He paſſed the night indifferently, from pain of his back. Cort. ut heri tertia quaq; hora ſumat. P M he had very little ſickneſs at ſtomach, and was in good ſpirits.

20. His tongue was foul, he was thirſty

* Vid. 28vo die Wilkins—Caſe III.

when he awoke, and complained of debility; the bliſtered part pained him. Corticem atque vin. adhuc quarta quaque hora, et anodyn. h. ſ. capiat.

21. He was recovering, but his neck pained him a little. Ut heri præſcripſi.

22. He continued to recover.—Corticem ut ſupra ter in die capiat.

23. He was feeble. Corticem bis in die cepit, et vino, ac diæta idonea utitur.

He continued to recover, though ſlowly, and followed this regimen until the 28th, when he was ſent on duty.

CASE VIII.

William Elliot, a marine, about thirty-two years of age, (a ſtrong man, whoſe berth was contiguous to a perſon ill of fever) was ſeized on the morning of the 14th of Nov. with chillineſs, head-ache, and lumbago, and afterwards with alternate chills and heats; his pulſe being ſomewhat quicker and harder than natural. Emet. ſtatim ſumat; et h. ſ. ſal. C. C. gr. v. opij gr. ſs. boli forma præſcripſi, ſuperbib. menth. infuſ.

2. He was a little relieved by free perſpiration

in the night, and two ſmall ſtools; and the tongue was white. Sal. cath. amar. ℥i. ſumat. PM he complained of alternate heats and chills, of univerſal pains, head-ache, and thirſt; his ſkin was hot and dry, and he was much dejected. Veſicator. inter ſcapulas admovi, ac bolum ſudorificum, h. ſ. dedi.

3. He paſſed a reſtleſs night from head-ache, pain over the eyes, lumbago, flying pains, and an urgent thirſt, though he perſpired freely, and the pulſe was moderate; his tongue continued foul. Medicinam quam pro Wilkins ægritudinis ſuæ 28vo (Caſe III.) præſcripſi, cepit, quarta quaque hora, atque ſp. C. C. gut. xxxv. ſuperbib. potione diluente. PM he had a very copious ſtool, and was giddy.

4. He complained of head-ache, eſpecially about his eyes; of pains in his left ſide and back, of an ill taſte in his mouth, and that his tongue was foul. Sal. cath. ℥vi. hodie capiat. PM the medicine operated, but a violent exacerbation, particularly of head-ache, came on; his eyes were ready to ſtart out of his head, as he ſaid. Medicin. ut heri, hodie, ſine ſp. C. C. octava quaque hora ſumat.

5. He

5. He ſweated, and the head-ache remitted about midnight; his lumbago was troubleſome, and a dyſuria (probably from the bliſter) commenced, and his tongue continued very foul. —Pulv. cort. ℥ i. cort. decoct. ℥ ij. tart. emet. gr. ¼. ſecunda quaque hora capiat. P M an exacerbation began at ten am. with a violent ſhooting pain of the left ſide, but he now complained leſs of lumbago and head-ache: his body was lax: bolum ſudor. h. ſ. repetivi.

6. At midnight there was a remiſſion; he ſweated as uſual, and his pulſe continued ſofter; the pain of his ſide affected his bowels at times. Ut heri præſcripſi. P M. the exacerbation began at two pm. during which the head-ache was the moſt ſevere ſymptom, attended with cough; but the body continued lax. Bolum h. ſ. cepit.

7. There was a remiſſion at midnight: he complained of the back part of his head and neck being painful: the diarrhœa continued moderate. Medicinas ut heri cepit. At one pm. a paroxyſm came on. Anod. h. ſ. cepit.

8. The remiſſion began as uſual about midnight, with a free perſpiration, but he ſtill complained of his ſide. Ut heri præ-

ſcripſi, mane et veſpere. PM he had a ſlight paroxyſm between four and ſix.

9. At three this morning a ſlight paroxyſm came on, which terminated by perſpiration in the forenoon. Medicinam adhuc ſumpſit mane et veſpere.

10. A paroxyſm returned at three this morning, with pain of the ſide, thirſt, and heat, which went off by perſpiration. Ut heri. PM he complained of the head-ache. Decoct. ſerp. ſexta quaque hora cepit.

11. He ſweated profuſely at night, and had three ſtools; he now began to recover ſtrength, though ſlowly. Corticem atque corticis decoct. bis in die cepit, et anod. h. ſ.

12. He ſweated profuſely, and had a reſtleſs night. Ut heri.

13. He was ſent to ſick quarters, in a promiſing way of recovery; and he, as well as the other patients whoſe caſes have been related, ſoon recovered.

CASE IX.

John Audley, aged about 30, a ſtrong man, and irregular at times, was ſeized the evening of the 22d of Dec. 1776, with ſhi-

vering, head-ache, and univerſal pains, particularly in his ſide. Emet. ſtatim, ac eſſent. antim. gut. xxx. tinct. theb. gut. xxx. h. ſ. ſuperbib. menth. infuſionem capiat.

2. He perſpired in the night, and was a little eaſier. Sal. cath. amar. ʒi. cryſtal. tart. ʒij. dedi. P M he complained more of the pain of his ſide: veſicator. lateri fuit admotum, et ſudorific. h. ſ. repetitum.

3. He was relieved of pain, but his countenance was much diſeaſed. Cort. decoct. ʒii. tart. emet. gr. ¼. quater in die cepit. P M he complained of ſevere cough. Anod. dedi h. ſ.

4. At eight laſt night a paroxyſm came on, during which heat and thirſt were great; the cough was urgent, and reſpiration laborious.—Ut heri, ſecunda quaque hora præſcripſi. At ten A M there was a remiſſion, and he had no pain in the afternoon.

5. A paroxyſm returned laſt night, but I could not learn at what time. He reſted ill from inquietude, cough, pain of his ſide, and dyſpnœa. A M he wandered, breathed with much difficulty, looked ghaſtly, and in the afternoon muttered or ſung inarticulately.

Jul. cardiaci ʒij. ſecunda quaque hora cepit; et veſicator. lateri renovatum fuit.

At ſix PM he died.*

SECTION IV.

METHOD OF TREATMENT WITH ANTIMONIALS, CAMPHIRE, BLISTERS, &c.

THE ſame evacuations were now procured, and after the ſame manner as in the bark treatment, except the letting blood, which I had entirely left off, unleſs there appeared an abſolute neceſſity for it †. The patients enjoyed every other advantage, and in a greater degree than they had done under

* This is the only caſe out of 216 wherein the bark can be ſaid to have failed; and had it been given earlier and in ſubſtance, the patient might perhaps have recovered.

† The bark method of treatment preceded this, ſo that none of the patients who were treated in the manner now to be deſcribed were let blood in the beginning of the fever, except Wm. James, a marine, one of the firſt who were ſeized with it.

the bark method,—as apples, oranges, limes, and wine, which we got out of a prize. The evacuations were carefully attended to, being either reſtrained when they were exceſſive, or promoted when they were ſuppreſſed, and bliſters were applied as freely. The camphire and tartar emetic were generally preſcribed as in the following mixture.

Mixtura Febrifuga.

℞ Camphor. ʒ iſs.
Tart. emet. gr. viij.
Sacchari albiſſ. ʒ ijſs.

Bene ſimul triturenter, deinde gradatim ſago* tenuiſſimi uncias triginta adde; atque, ſi viſum ſit, Sal. Nitri pur. ʒij ſs.—fiat mixtura, à cochleari uno ad tria, vel quatuor, pro doſe:—which was repeated every one, two, three, four, five, ſix, ſeven, or eight hours.

In a few caſes, from twenty to thirty grains of theriac, with three grains of camphire, was adminiſtered every ſix or eight hours, inſtead of the mixture; and in ſome of the caſes the tartar emetic and nitre were given without camphire.

* This ſuſpended the camphire as well as a ſolution of gum Arabic.

SECTION. V.

CASES OF FEVER TREATED WITH ANTIMONIALS, &c.

CASE X.

WM. James, marine, aged about 36, naturally ſlothful, and a tipler, was ſeized, on the 5th of October, 1776, with head-ache thirſt, pain of the left eye, when he looked at any object, and giddineſs, but did not complain until the 6th. His pulſe was rather quick and full. Mitte ſang. ℥xii. et duabus horis elapſis. cath. exhibe. But he became faint and loſt little blood.

3. He complained of being weak and faint, which I imputed to his natural indolence. Elix. vit. gut. xx, bis in die ſumat.

4. He had a diarrhœa and was ſtill faint.—Pulv. ipecac. gr. iij. opij gr. ſs. fiat bolus, quater in hodie ſumendus.

5. His complaints were numerous; he had an ague, he ſaid, in the night, and bilious vomiting in the morning. Tart. emet. gr. ſs. ſecunda quaque hora capiat.

6. He was ſeized with vomiting, and purging. Ut 4to præſcripſi.

7. He ſtill complained of weakneſs, but from his bad character, and ſo little appearance of diſeaſe about him, I ſuſpected that his illneſs, in a great meaſure, was counterfeit. Tinct. cort. ℥iſs. elix. vit. gut. v. capiat bis in die, and portable ſoup.

8. I was informed he had been delirious in the night; he continued reſtleſs, his pulſe was ſmall and ſlow, and his ſkin rather cold. I ordered him a ſpoonful of cordial julep frequently, and wine in his ſago; bliſters were applied between his ſhoulders and to his ancles. P M he perſpired, but wandered at times, and complained of weakneſs.

9. He died this morning.

Few having had the fever before this man, and theſe having been relieved by very ſimple means, I did not think the infection had been received, or that he was in danger, until the 8th, when it was obſerved too late.

CASE XI.

Wm. Hardie, aged about 32, was ſeized the 12th of January, 1777, about noon,

with ſhivering, head-ache, and univerſal pains. Emetic. ſtatim cepit.

2. He complained much of debility, giddineſs, and thirſt, and his tongue was foul. P M his left ear ached, and diſcharged freely. Cath. lene ſumpſit: veſicat. inter ſcapulas admovi.—Towards night he became ſpeechleſs, his face diſtorted, and he was delirious. Sudor. h. ſ. et opij gr. i. dedi.—About two hours and a half after taking his medicines he became quiet, and ſeemed to ſleep. The delirium returned more violent at midnight; and, notwithſtanding the opiate was repeated, he continued delirious, and died at three on the third day; not having been ill 48 hours.*

CASE XII.

John Birridge, aged about 40, was ill of ſhivering, head-ache, retching and vomiting, ſeveral days before he complained (which was on the 19th of Feb. 1777) of being hot and cold alternately, and of great debility. The pulſe was quicker, and the ſkin hotter than natural. Emet. ſtatim dedi.

* Query—Was this patient's death occaſioned by the diſcharge from his ear being ſuppreſſed?

2. A ſevere pain ſeized the left ſide with frequent cough, which increaſed the head-ache, and the thirſt was urgent in the night. Two ſpoonfuls of the febrifuge mixture was preſcribed every two hours. P M his countenance was wild, he wandered, had tremors at times, complained of great languor, giddineſs, and inceſſant thirſt; his ſtools were watery. Veſicat. inter ſcapulas admovi, et theriac. Androm. gr. xx. camph. gr. iij. boli forma, repet. 8va quaque hora.

3. Partial momentary ſweats during the night did not relieve him. Ut poſtrema nocte præſcripſi. P M the watery ſtools continued, and petechiæ appeared.

4. He reſted ill from wandering and inquietude, the ſkin was hot, the pulſe ſmall, the tongue whitiſh, and he was coſtive. Ut heri. Enema ut viſum ſit injectum. P M no better.

5. He continued to ramble, his countenance was ſooty; he complained of heavineſs about the heart, and thirſt, though the pulſe was moderate, and his body open. Ut 2da præſcripſi, ac vini pauxillum dedi. P M great pain about the ſcrobiculus cordis, from an

inceſſant cough, which brought up phlegm only. Veſic. pectori admovi, et anod. h. ſ.

6. He was ſomewhat relieved after a quieter night than the two preceding; the tremors or catchings had left him, and his bliſters pained him; his tongue was white. Medicinas ut heri cepit, et diæta nutriente atq; vino utitur.

7. Laſt night the rambling and inquietude returned; the delirium now increaſed, and he complained of cold. Theriac. Androm. ʒ ſs. camph. gr. ij. fiat bol.; ſexta quaq; hora ſumend. PM he became gradually worſe, countenance ghaſtly, the pulſe became very feeble, the tongue brown, a rattling in his throat, and he was coſtive. Enema commune fuit injectum.

8. He reſted ill from groaning and inquietude, and had two ſtools in the night. His pulſe was imperceptible at times; he rolled about his eyes, and turned them up while the delirium continued. Pulv. cort. Peruv. ʒi. tart. emet. gr$\frac{1}{4}$. vin. rub. Oport. ʒiſs. m. fiat hauſtus: ſecunda quaq; hora præſcripſi.—He took this medicine but once, for he died at 7 PM.

CASE

CASE XIII.

Thomas Baker, a priſoner, who had been in the Weſt-Indies, and ill on the paſſage, was coſtive five days before he complained; and gave a very unſatisfactory account of his illneſs: his head-ache had been relieved the day before by an hæmorrhage from the noſe (viz. March 29, 1777): his countenance was ſallow, and much diſeaſed; he complained of univerſal ſoreneſs and pain about the ſcrobiculus cordis, the pulſe was quick but ſmall, and the tongue white. Sal. cath. amar. ʒi. cepit ſtatim (which gave him ſeveral ſtools); poſtea mixt. febrifug. ʒiſs. quater in die dedi, atq; potione com.

2. The præcordia were now relieved, but he complained of univerſal pains; the pulſe was more moderate:—Mixtur. febrifug. tertia quaq; hora præſcripſi.

3. Severe head-ache, uneaſineſs, and thirſt haraſſed him, and his pulſe was ſtill quick. Ut heri.—P M he was greatly dejected, and breathed diſagreeably through his noſe. Theriac. And. gr. xxv. camphor. gr. ij. boli

forma octava quaq; hora cepit; et veſicat. inter ſcapulas admovi.

4. He paſſed the night very ill from inquietude and delirium; his reſpiration ſtill diſagreeable, and his countenance ghaſtly. Ut poſtrema nocte, hodie præſcripſi ſexta quaq; hora. At one P M he died.—I was informed that he had had a fever not long before, on board the ſloop he came from; and that the maſter died on his paſſage from the Weſt-Indies. The man was lifeleſs and diſpirited before I ſaw him; the thoughts of his being a priſoner might add to his depreſſion, though he was as well treated as our own men.

CASE XIV.

Anthony Gafford, aged about 23, a ſtrong, irregular man, was ſeized the 12th of March, 1777, with ſhivering, head-ache, ſickneſs at ſtomach, and univerſal pains, eſpecially of the loins, but did not complain until the 13th.—Emet. ſtatim, ac ſal. C. C. gr. v. opij gr. ſs. h. ſ. in boli forma cepit.

2. He paſſed a reſtleſs night from coughing; the head-ache continued, his tongue was foul, and his pulſe quick. Sal. cath. amar. ʒi. cepit;

pit; et poſtea mixt. febrifug. cochlear. iv. quater in die. P M he complained of univerſal foreneſs.

3. The cough diſturbed him much in the night, but his pulſe and the head-ache were now moderate. Mixtur. ut heri ſumpſit. P M no alteration.

4. His head was much affected in the night by cough, and there was an exacerbation of heat and quickneſs of pulſe. I ſuſpected he had been irregular. Mixtur. adhuc cepit.

5. He paſſed the night ill from pain in the left ſide, which was increaſed by cough; he was very reſtleſs and complained of thirſt; and the teeth were covered with ſordes. Mixtur. ut ſupra, et linct. emol. ad libitum utitur. Veſicat. lateri etiam admovi.

6. Cough, inquietude, and rambling prevented ſleep; reſpiration became laborious, his tongue was black, and the pulſe was not perceptible. Pulv. cort. Peruv. ʒi. tart. emet. gr. m. vin. alb. ʒij. tertia quaq; hora præſcripſi.—One P M he died.

CASE XV.

Wm. Watkins, aged about 37, was ſeized on the 13th of April, 1777, with violent head-ache, ſickneſs at ſtomach, and lumbago; and ſaid he was ſubject to fits. Emetic. ſtatim cepit, et ſudorific. h. ſ.

2. He was not relieved; the back part of his head ached chiefly. Sal. cath. ℥i. hodie cepit, ac ſudorific. h. ſ.

3. The head-ache ſtill continued. Veſicator. inter ſcap. admov. et mixtur. febrifug. quater in die cepit.

4. He was very hoarſe, and had an urgent cough. Ut heri præſcripſi.

5. No alteration for the better, and his pulſe was full. Mitte ſang. ad ℥viii. et exhibe mixtur. ut heri, ac anodyn. h. ſ.

6. He complained of griping, and ſwelling of the abdomen, diſturbing him in the night. —Sal. cath. am. ℥i. mane; deinde mixtur. ut antea. P M he had no complaint, but his countenance was wild, and his pulſe quick. Camphor. gr. iv. opij gr. ſs. dedi.

7. He began to rave, and became very reſtleſs at midnight; the delirium continued

through the day, and he looked at his fingers. Mixtur. adhuc cepit. P M effusion of tears: camphor. bol. atque op. h. s. cepit; ac vesicatoria brachijs internis admota fuerunt.

8. The delirium abated, and he passed the night quieter; but his countenance was diseased, his respiration short, and the pulse was small. Theriac. And. gr. xx. camphor. gr. iij. sexta quaq; hora præscripsi. P M no alteration, only the cough was more urgent: ut 6ta h. s. præscripsi.

9. He passed a restless night from an increased delirium; the countenance was ghastly, and his tongue browniſh. Ut heri: vesicat. talis internis etiam admovi. P M he was comatose and delirious alternately.—Had involuntary stools for some days.

10. The blisters were neglected to be applied yesterday; the pulse was not perceptible, his teeth were covered with sordes, and his tongue was black. Ut heri præscripsi.

11. He was quieter, and rational at times; but was quite languid, and his pulse scarce perceptible. Ut heri medicinas cepit. At 7 P M he died.

CASE XVI.

Stephen Hutchins, about 38 years of age, on the 19th of Dec. 1777, was ſeized with ſhivering, bad taſte in his mouth, head-ache, lumbago, and pain, with a ſenſation of ſwelling, about the epigaſtric region, but did not complain until the 20th. Emet. ſtatim cepit. The emetic operated by vomit and ſtool.—Tart. emet. et opij ana gr. ſs. h. ſ. dedi.

2. His head-ache and pain in the back were relieved by perſpiration in the night; but he was haraſſed with urgent cough, and ſoreneſs at his ſtomach. Mixtur. febrifug. ter in die; linct. emol. ſubinde, ac ſudoriſic. ut poſtrema nocte præſcripſi.

3. He paſſed the night ill from inquietude; and the cough, head-ache and lumbago diſtreſſed him at times: he was chilly and hot alternately, the tongue was red in the middle, and thirſt was troubleſome. Mixtur. quater hodie cepit, ac anodyn. h. ſ. About two in the afternoon he had a ſlight remiſſion.

4. About ten laſt night the exacerbation returned; a tinnitus aurium, ſoreneſs, and entire deafneſs of the left ear, which had been

a little painful for two days; the pulſe was ſlower than natural, and the countenance ſallow and diſeaſed. Mixtur. adhuc cepit, et anod. h. ſ. tuſſe urgent.

5. He complained moſt of his ear and deafneſs. Ut heri præſcripſi.

6. An exacerbation came on about ten laſt night, with great pain at the ſcrobiculus cordis, which went quite round the thorax; he had a teaſing cough, an unnatural reſpiration, and was much depreſſed. Ut heri, et tinct. ſerp. Virg. ʒi. 11 AM et 4 PM dedi; veſicat. etiam dextro epigaſtrio admovi.

7. At 8 AM an excruciating pain ſeized the right ſide after he had paſſed a very reſtleſs night:—opij gr. i. deglutivit, ac volatili linimento linivit:—mixtur. tertia quaq; hora præſcripſi. Enema ut viſum, et opij gr. i. Et ſanguinis ʒiv. mitte. PM no remiſſion of the pain, the part was ſwelled and tenſe, the breathing laborious, the alæ of the noſe were diſtended, the face was fluſhed, and covered with ſweat, and the pulſe was ſmall.

8. After the third clyſter he had a ſmall diſcharge, with great flatulencies, which relieved him, and ſoon after he had ſeveral white frothy ſtools: however, he paſſed an

indifferent night, neither the pain, hardneſs, nor ſwelling being carried off: his throat rattled in his ſleep; am. he was faintiſh when taken out of bed, but became better, and held out very well to ſick quarters, where he died.

CHAP. VII.

TABLE I.

Points out the Superiority of the Bark over all other Medicines adminiſtered in Fever on board the Juno.

Under the Bark Method		Under all other Methods	
Were treated on Board	Died on Board	Were treated on Board	Died on Board
216	1	296	6
Proportion	1 in 216	Proportion	1 in 49, nearly

TABLE II.

Points out the Succeſs of the Methods of treating the Juno's Fever Patients at New York and Rhode Iſland Hoſpitals.

To New York Hoſpital, and treated with Camphire, &c.		To Rhode Iſland Hoſpital, and treated with Antimonials, &c.	
Were ſent of Fever Patients	Died	Were ſent of Fever Patients	Died
36 *	5 †	26 ‡	4 §
Proportion	1 of 7 nearly	Proportion	more than 1 of 7

* Of whom 15 were convaleſcents.

† Of whom 4 were convaleſcents.

‡ Of whom ſeveral went from a prize without my ſeeing them.

§ Of whom *one* was ſent from a prize without my ſeeing him.

TABLE

TABLE III.

Shews the Proportion of Deaths under the different Methods of managing the Fever.

Fever Patients treated with Bark	Fever Patients treated in all the other Methods on board the Juno, at New York, and Rhode Iſland Hoſpitals
216 *	296
Died 1 of 216	Died more than 1 of 16

* A number of patients took bark and recovered, after the time of my general method of treatment with bark expired, who are not here included, but are claſſed with thoſe under the other methods of treatment.

END OF PART I.

OBSERVATIONS, &c.

PART II.

INTRODUCTION.

HAVING, upon a careful and impartial review of my Phyſical Journal and my Obſervations on board the Juno, ſeen the great difference between the ſucceſs of the Antiphlogiſtic, or debilitating Antimonial practice; and of the Bark, or reſtorative treatment of fever—no room was left for deliberating which ought to be adopted and rigidly adhered to. Upon this ground, and to eſtabliſh irrefragably the ſuperior efficacy of the bark, regardleſs of the expence which I knew muſt attend the experiment, and however ill I could afford it, I provided myſelf with ſupplies from time to time on board of the different ſhips I belonged to during the war, and ſince; and have found it ſucceed beyond expectation in a very extenſive practice, as will appear in the ſequel.

To prove this, I might inſert many hundreds of caſes which have ſucceeded under this method, did I not judge it more conducive to public benefit, to relate particularly the few caſes which failed under it; and briefly to lay before the reader corroborating proofs, in tables, of the ſuperior efficacy of bark; truſting that this liberality will induce the learned and diſcerning reader to excuſe thoſe errors which he might otherwiſe be inclined to cenſure.

The following obſervations will therefore, it is hoped, be found as beneficial to mankind as the ſubject is important. I have been pointed in marking by what means infection was firſt brought, and often renewed, on board the Edgar, Romney, and Blenheim; notwithſtanding Admiral (then Captain) Elliot's uncommon care and aſſiſtance in endeavouring to ſubdue the infection, and preventing its being brought on board, and his great benevolence to the ſick. During the late war I was fortunate in ſailing with officers, who made it their ſtudy to aſſiſt me, every way which I pointed out, as well as with their ſtock and wine.

To bring all the officers over to a full exertion of their authority and example to aſſiſt

the ſurgeon to ſubdue infection when introduced, and to prevent its being brought, on board, it is only needful to remind them, that without a healthy ſhip's company they never can undertake active ſervice, and that to them alone the ſole merit of their ſhips' excelling upon any ſervice entirely redounds; while a ſurgeon, be his abilities and merit ever ſo great, is ſeldom known, and by very few of the officers ever thought of after the ſhip is paid off; and ſhould the ſhip by reaſon of ſickneſs be put paſt ſervice, in ſpite of the ſurgeon's unſupported and unaſſiſted abilities, and beſt endeavours, at the momentary riſk of his life is ſilently blamed, perhaps d——d by the officers as the cauſe of their loſs of a good cruiſe.

This Part contains more obſervations, and exhibits a much wider field for medical attention than the former, for ſeveral reaſons, particularly, becauſe of the difference of the complements of the two ſhips. I have therefore thought proper to enlarge the plan of the former edition, by inſerting a Monthly Review of the Sick Liſt for the time I belonged to the Edgar, which I am hopeful will engage the reader's attention. The Tables and Caſes

are newly arranged; and altogether compriſe a ſuccinct hiſtory of the ſtate of health of ſeldom fewer, but generally more than ſix hundred men, with many incidental and intereſting obſervations for very near three years. The Edgar was chiefly employed with the Weſtern ſquadron.

My ſincere thanks are offered to many of my aſſiſtants* during the late war, for their attention to the ſick, and adminiſtering their medicines as they were preſcribed.

* Particularly Mr. O'Neil on board the Juno; Mr. John Wardrobe (now a Surgeon in the Navy) and Mr. John Dickſon on board of the Edgar and Romney. Mr. W. Ogilvie, my aſſiſtant on board the Blenheim and Saliſbury ſince the peace, unfortunately died laſt June of conſumption.

CHAP. I.

MONTHLY REVIEW *of the* EDGAR'S SICK LIST, *containing Remarks and Meteorological Obſervations, from 24th of May* 1779, *until the End of February* 1780.

MAY.

I WAS appointed the 24th to His Majeſty's ſhip Edgar, building at Woolwich; and the pendant was hoiſted next day. Few of the officers were yet appointed.

JUNE.

The ſhip was launched the 30th. Rendezvous were opened in the different parts of the kingdom to enter men. The number ſuppoſed to have entered for the ſhip exceeded 2000. The officers were appointed.

JULY.

The ſhip was haled into dock, and, after being ſheathed with copper, was haled out again.

again. Sixteen men were received this month from the Conqueſtadore. Four complained; three of whom were ſent to ſick quarters—viz. one with fever; one with rheumatiſm; and one with wound.

AUGUST.

Ninety-ſeven were received from the Conqueſtadore, and forty-ſix from His Majeſty's ſloop Sylph. Thirty-one patients complained—five of fever; one of dyſentery; one of belly-ache; two of diarrhœa; ſix of ſcurvy; one of head-ache; one of ſore throat; one of giddineſs; one of ſcald; one of ſtrain; one of rupture; ſix of contuſion; one of fracture; one of wound; and two of inflammation. Four of whom were ſent to the hoſpital, viz. one with flux; one with rupture; one with contuſion; and one with fracture. Four of the ſcorbutic men came from the Sylph ſloop, and the other two had been lately at ſea. Captain Elliot was ſuperſeded for ſome days by Captain Ferguſon.

SEPTEMBER.

We received 162 men from the Conqueſtadore; 103 from the Greenwich, a receiving

or guard-ſhip in the river; 4 of the Sylph's men, from the Dunkirk guard-ſhip in the Downs, who had been at ſick quarters; and a Captain, Lieutenant, and 25 marines from Chatham. This month we ſailed down the river and cruiſed ſome days in the North Sea; and afterwards anchored in the Downs.—29 complained of fever, who chiefly came from the Conqueſtadore guard-ſhip at the Nore;—one of dyſentery; two of belly-ache; one of rheumatiſm; one of gout; one of head-ache; three of cough; one of hemoptyſis; one of conſumption; one of epilepſy; one of nephritis; one of hæmorrhoides; one of eruption; one of ſcald; two of ſtrain; one of rupture; ten of contuſion; two of fracture; and two of inflammation.—62 in all. Sent only one to the hoſpital with fever.

Our complement is 600.

OCTOBER.

Twenty men and 30 ſupernumeraries came on board from the Dunkirk, and 70 marines with a Lieutenant from Portſmouth, beſides numbers who were ſent from rendezvous and who entered on board.

In this manner the ſhip was manned, which ren-

rendered it abſolutely impoſſible to prevent infection from being brought on board, or the ſhip from becoming ſickly. For all the guard-ſhips in time of war are magazines of infection, no leſs than tenders are. On the 9th we arrived at Spithead, and learned that ſeveral ſhips of the fleet under the command of Sir Charles Hardy, Vice Admiral Darby, and Rear Admirals Graves, Digby, and Sir John Roſs, were ſickly, particularly the Canada, Intrepid, Shrewſbury, London, and Namur; three or four of which were put paſt ſervice, ſo much were they diſabled by ſickneſs. It is ſaid the Canada during the laſt and this month ſent 380 to the hoſpital; and the Intrepid 200, for fever chiefly. The Terrible ſent near 200, and the Formidable above 100, for fever. But I am not certain that this account is accurate.

On the 11th I was obliged to go to the hoſpital with ſome men that my aſſiſtants could not get admitted; viz. one weak fever convaleſcent, whoſe diſeaſe I was obliged to change to fever before they would admit him; two with fractures; and four with ſcurvy; the Sylph's men. They had ſo many fever patients in the hoſpital, that they had no room

for chronic diſeaſes—unleſs they were marines; and theſe, though on the hoſpital books, were ſent to Fortune. One of the phyſicians told me, "That there were about 2700 on the "hoſpital books, chiefly fever patients; that "the infection was extremely virulent; that "on board many of the ſickly ſhips, orders "had been ſent to deſtroy the bedding and "clothes belonging to the ſick and convaleſcents; and that they were ſupplied with "others at Government's expence." The treatment of fever on board of the ſickly ſhips was the antiphlogiſtic or antimonial.

The 17th. Wine was ſerved to the ſhip's company, the beer being out. 22d, at one PM the Admiral made the ſignal to weigh, and the fleet came to ſail. I had the ſick berth appointed on the larboard ſide under the forecaſtle. We ſailed with 41 in the liſt.—12 were fever and 2 were meaſles patients. About the 26th catarrhous ſymptoms became very general amongſt the ſhip's company. The 28th at noon the fleet anchored at Torbay; and were ordered freſh beef 29th. Our ſhip's company at three watches. I purchaſed ſome apples and onions for the ſick.—30th. A fleet in the Offing. The ſhip was ſmoked

with wood fires. I bought turnips for the ſick.

One hundred and forty patients complained, viz. fifty-nine of fever; three of meaſles; one of belly-ache; one of diarrhœa; one of indigeſtion; two of ſcurvy; four of rheumatiſm; ſixteen of head-ache; eleven of cough; one of ſore-throat; one of hæmorrhage; one of epilepſy; one of blindneſs; one of nephritis; one of eruption; three of itch; two of ſtrain; fifteen of contuſion; five of wound; two of inflammation; two of furuncle; one of abſceſs; and ſix of ulcer.—An increaſe of 78; 35 in it the laſt day. Five only were received at the hoſpital; one with fever; one weak and bad habit a long time; two with fracture; and one with contuſion and old age.

The thermometer hung in the larboard quarter gallery; and the mean height from the 22d to the end was about 60. The moon was full the 24th. From the 22d to the end, the wind varied from N E round to N, continuing but a ſhort time at one point. 24, 25, 28, 29. and the atmoſphere generally cloudy.

NOVEMBER.

The thermometer was once ſo low as 42, and never above 63—the mean height 58. The wind veered from S E to W N W and WSW, then to N and NW; back to W, and ſoon again to N W, varying until it came to ENE; then to NNW and NW; from thence to NNE and Nly, then to the Wrd, NNW and S. 11, 13, 14, 15, 17, 18, 19, 23 H. 22 H, 25, 27, 28. 29 L. The atmoſphere was chiefly cloudy, and hazy towards the end, ſeldom clear. The moon changed the 8th, and was full the 23d.

The number of ſick decreaſed twelve, 128 having complained, viz. ſixty-one of fever; four of meaſles; two of belly-ache; one of diarrhœa; three of ſcurvy; eight of rheumatiſm; one of cough; one of mania; two of ophthalmia; one of blindneſs; fourteen of itch; five of ſcald; four of ſtrain; one of rupture; ſeven of contuſion; one of fracture; five of wound; one of inflammation; one of furuncle; two of abſceſs; and three of ulcer. Some ſlight complaints not inſerted.

One died of gout, and one of meaſles. Sent one with fever; one with conſumption;

one with rheumatiſm; one with blindneſs; one with mania; and one with fracture; 6 in all, to the hoſpital. I put onions in the ſcorbutic men's broth and peaſe; and allowed them their pint of wine with ſugar and elixir of vitriol in it. Tea for breakfaſt, and two apples each a day. The fever patients' diet was tea, rice and ſugar, freſh meat broth and apples, and ſome half a pint and others more wine a day, as I judged proper. Grog was ſerved to the ſhip's company. The cough was a very troubleſome ſymptom to fever patients.

On the 13th ſome beer came on board for the ſhip's company; but I had wine allowed for thoſe of the ſick I thought proper.—16th the fleet ſailed. Our people continued at three watches. 19th the round houſe was incloſed in the ſick berth. Half wine half grog was ſerved to the people until the 28th, and then beer. We arrived at Spithead the 24th, and Sir Charles Hardy ſtruck his flag the 26th. The freſh beef was huſbanded to laſt the ſick until the day before we arrived at Spithead; the Captain gave them mutton that day, and the ward-room the next day.

As many of the men got drunk with their grog made with three waters, I propoſed to the Captain to mix it with four waters; which was done.

The ſhip was kept clean, frequently ſmoked and dried with wood fires; and the ſick berth was kept clean, frequently ſprinkled with vinegar, and aired every day with fires, which is to be underſtood in future, whether mentioned or not.—45 in the liſt at the end of the month.

DECEMBER.

Thirty-ſix complained of fever; two of meaſles; one of belly-ache; three of ſcurvy; ten of rheumatiſm; one of head-ache; nine of cough; eleven of ſore throat; one of ophthalmia; one of old age; one of eruption; five of itch; three of ſtrain; four of rupture; nine of contuſion; one of diſlocation; three of fracture; three of wound; and four of inflammation.—108 in all.

1. 2. . . 3. 24, 25, 26 F. The wind was from the W to the S of W in the beginning of the month; but until the 24th I did not pay much attention to the weather; from that to the 28th the wind was from NE to E, and

it then got to the S, where it continued until the end. The mean height of the thermometer was about 48. The atmoſphere was chiefly either hazy or cloudy. The moon changed 9th, and was full the 24th.

Sent 12 to the hoſpital, viz. four fever convaleſcents (three rheumatic men; one with ſymptoms of ſtone; one with cough; and one with ulcer, by ſurvey;) and two marines invalided, but ſent with tickets; one for rupture; and one for lameneſs of his hand. Three other men were invalided; one for old fracture and old age; one for rheumatiſm and old age; and one for old age. The ſick liſt varied frequently, and there were 28 in it only at the end of the month.—A very conſiderable decreaſe, 17.

We could get no portable broth at Haſlar hoſpital for the ſick. On the 24th we ſailed with upwards of 20 ſail of the line, with a very numerous convoy of merchant ſhips, and tranſports with ſtores and proviſions. The 28th we finiſhed the freſh beef. The cough and ſore throat complaints were truly catarrhous, and yielded to neutrals with tinct. cantharid. and gargariſms.

JANUARY, 1780.

The 3d the ſhips under convoy parted from us, all well.—The 8th A M a ſtrange fleet appeared, and our ſignal was made to chaſe. Upon our ſhewing by ſignal that the chaſe were enemies, a general ſignal to chaſe was made. Between one and two P M the Edgar brought-to the headmoſt ſhip of the enemy, after having in the chaſe brought-to 16 or 17 ſail large and ſmall of them. The Bienfaiſant brought-to the enemy's convoy, a new 64 gun ſhip, afterwards named Prince William, in honour to His Royal Highneſs Prince William, who was in the fleet on board the Prince George; and one of our frigates brought three or four ſail to, to windward. About 23 ſail of Spaniſh ſhips in all were taken, called the Caracca fleet, bound from St. Sebaſtian to Cadiz. Two hundred priſoners were brought on board of us P M, and next day above 100 of them were ſent to other ſhips. The 10th, the America parted company with the fleet, being ordered to convoy ſome of the prizes to England. One midſhipman and ten men were ſent on board the Prince William, now put into commiſſion. The priſoners lay

in the gun-room, and were got on deck in the day-time. The 12th. Sore throats were very troubleſome to ſome of the fever patients. My firſt aſſiſtant was ſeized with fever, and my ſecond was ailing. The apoplectic patient became inſane. The 13th. The beer was finiſhed; and on the 14th, wine was ſerved to the people.

The 16th. About one PM a ſignal was made for a general chaſe after a ſtrange ſquadron; and when aſcertained to be an enemy's, the ſignal was made to engage them as our ſhips got up. The Edgar then ſailing very well, ſoon got up with and engaged the ſternmoſt ſhip of the enemy cloſely, until another of their ſhips was obſerved to hale up to croſs our forefoot to rake us; which obliged us to ſheer from the ſhip we were engaged with, to give the other ſhip our broadſide. In the mean time the former blew up, by accident it was thought, and only one man belonging to her was ſaved, who ſoon after died of his wounds at Gibraltar. Of the enemy ſeven ſail of the line were taken and deſtroyed. The 19th. We arrived at Gibraltar, and only found the Panther, with Admiral Duff's flag on board of her, and the Apollo belonging

our fleet; the reſt were *black ſtrapt**. The 20th. We ſent ten men to the hoſpital, viz. ſix with wound; one with eryſipelas; the maniac, from apoplexy; one with blindneſs; and one with cough. 22d. One Lieutenant and a party of men were ſent to aſſiſt in clearing the Caracca prizes. 29th. Seventy-one priſoners were ſent on board of us. Our ſignal was made to ſlip and chaſe a Spaniſh ſhip ſtanding in to Algaziers, which we ran on ſhore. 30th. I was ſeized myſelf with fever, and a number of the priſoners were ill of it. I could not learn whether they had been ſickly on board of their own ſhips or not. All the fleet did not get into the bay before the 25th.

It is remarkable, that only five complained of fever after the 16th, notwithſtanding the ſhip was crouded with priſoners. This confirms the remark I made on board the Juno, "That infection is greatly checked on board of a ſhip by its coming to action, or firing a good deal." We had a Lieutenant of marines

* When ſhips do not get into Gibraltar, but are carried above it with the current, they are ſaid to be *black ſtrapt*.

and five men killed, and twenty wounded in the action, beſides ſeveral ſlightly wounded. I was not laid up with my fever attack.

The wind varied from S, back to E N E, N E, and N, returned to the S, and veered round to N W, where it continued ſeveral days and blew ſtrong, eſpecially the 16th P M. It got now to W; again returned to the N, and then back again to the W, and was variable to the end. The atmoſphere was chiefly cloudy, until the 19th, when we arrived at Gibraltar. The mean height of the thermometer was 61. The 9th, 22, 23, 24, T L. 25. 12, 13, 28, 29, 30, 31. . The moon changed the 6th, and was full the 21ſt.

The Sick Liſt decreaſed 28; eighty only having complained, in all; viz. twenty-eight of fever; one of eryſipelas; two of belly-ache; five of rheumatiſm; one of head-ache; two of cough; one of ſore throat; one of ear-ache; two of epilepſy; one of apoplexy; one of nephritis; one of eruption; one of ſcald; ſix of contuſion; one of excoriation; twenty of wound, beſides ſeveral of ſlight wounds; one of inflammation; two of furuncle; and three of ulcer.—17 in it at the

end of the month, which is 11 leſs than were in it the end of laſt month.

FEBRUARY.

Thirty complained of fever; one of dyſentery; one of worms; three of ſcrophula; two of cough; one of epilepſy; two of ophthalmia; two of eruption; three of ſcald; three of ſtrain; one of rupture; fourteen of contuſion; two of fracture; one of excoriation; three of wound; two of furuncle; one of abſceſs; and ſix of ulcer.—78 in all; ſo that there is on the whole a decreaſe of two, though the number of fever patients has increaſed two; and of contuſed patients above double;—a claſs of patients whoſe number always increaſes proportionably with the irregularity of the people.—* 18 were ſent to the hoſpital, ten with fever, four of whom were priſoners; two with rheumatiſm; one with cough; one with eruptions; one with fractured ribs; and three with ulcer.

There were ten in the liſt at the end of the month—ſeven leſs than laſt month.

* Through miſtake, 21 were inſerted in the former edition.

The wind was between the Weſtward and Northward until the 9th, then Eaſtward until the 17th; then Weſterly; Eaſterly again two days; then between W and N for three days; then E for three days; and after getting to the W a ſhort time, it returned to the E; 1,18... 2,17..3, 4, 9, 10, 11, and 16. New moon the 5th, and full about the 20th. The mean height of the thermometer was about 60.

I recovered the 1ſt, thank God. The ſick priſoners would not take medicine, I therefore applied to ſend them on ſhore. 3d. One hundred of our men were ſent on board the Prince William. 6th. Eight of the priſoners were ſent on ſhore, by ſurvey, in a cartel. The night of the 9th, a man was ſeized with fever, and let blood without my knowledge; I therefore gave ſtrict orders that no fever patient ſhould be let blood in future. 10th. Had a berth ordered for the fever priſoners on the ſtarboard ſide, under the forecaſtle. 11th. Grog was ſerved to the people. 13th. Sir George Rodney ſailed with the fleet and convoy. Our Captain was appointed Commodore by Sir George, to command the ſquadron left to aſſiſt in protecting the place, and Captain Gower his Captain. Beſides the Edgar, the

ſquadron conſiſted of the Panther, Porcupine, Enterpriſe, and Gibraltar armed ſhip. 14th. The Commodore's broad pendant was hoiſted, and he went on ſhore to viſit the Governor. One of the fever patients vomited a live worm. Slight ſymptoms of fever and cold were general. The Governor came on board the 16th or 17th. I was ordered to take care of all the priſoners, and to ſuperintend the hoſpital; and my firſt mate was appointed an aſſiſtant at the hoſpital. Deafneſs was a general ſymptom among the fever convaleſcents. The priſoners were landed the 23d from our ſhip, and were confined to part of the hoſpital. There were a number of priſoners on board of a ſhip which we haled into the Mole the 25th. One watch had leave to go on ſhore every day. My firſt mate was appointed Surgeon of the St. Fermin armed ſhip put into commiſſion; and a private marine on board the Edgar was found qualified to ſerve as my third mate. Seventeen added to the complement: they include the Commodore and his retinue.

The Commodore was ſeized with fever, from exceſſive fatigue and getting wet. His pulſe never exceeded 86, and he diſtinguiſhed the exacerbation himſelf, by an increaſe of cough,

cough, which accompanied the fever. After a moderate emetic cathartic and ſudorific of James's powder, and the pediluvium, he took the bark freely. He did not recover his ſtrength, nor was quite free of an affection of his breaſt and cough, until the ſecond day * after we got to ſea; and he then found himſelf perfectly well. I always felt myſelf affected by the eaſterly winds at Gibraltar; and until then my health was never affected by any climate or change of weather—except on the coaſt of Africa in 1769.

A Dr. Blane, who never was in the navy before, is taken under Sir George now Lord Rodney's protection, and was, he ſaid, ordered to ſuperintend the hoſpital while the fleet was at Gibraltar. I recommended the bark treatment of fever at the hoſpital, which was adopted†, and alſo that the bedding ſhould be aired every day in the ſun.

* 21ſt of April.

† About the end of the month.

CHAP. II.

A LIST *of* FEVER PATIENTS *ſent from the Fleet between the* 1*ſt January* 1780 *and* 31*ſt March following, to Gibraltar Hoſpital.*

Ships' Names	Number ſent	Number died	Remarks, and Proportion of Deaths.
Sandwich	74	5	The treatment of Fever Patients in the Hoſpital was the Antiphlogiſtic, until I ſuperintended at the Hoſpital, then the Bark method was adopted; but from the ſcarcity of bark, it could not be adminiſtered ſo liberally as I wiſhed.
Prince George	1		
Royal George	3	1	
Reſolution	35	2	
Edgar	10	2	
Minorca	1		
Gibraltar	11	1	
Defence	13	4	
Invincible	10	1	
Ajax	110	18	
Alcide	2	1	
Alfred	136	9	
Culloden	3		
Montague	2		
Monarch	1		
Cumberland	23	1	
Prince William	11	1	
Terrible	27	2	
Panther	21	5	
Enterpriſe	36	1	
Porcupine	6	1	
Fortuné	7	1	
Childers	4		
Hyæna	3		
St. Fermin	18	1	
Navy Ordinary	2		
	570	57	1 in 10
Spaniſh Priſoners	437	37	1 in 13 $\frac{8}{33}$
			Four of them died in the launch and in landing in Spain.

N. B. This Liſt can only gratify curioſity, without anſwering any good end; but it would be of conſequence to know in what manner they were treated on board their reſpective ſhips.

CHAP. III.

MONTHLY REVIEW *continued until the 31ſt of Auguſt.*

MARCH.

THE number of patients increaſed 10; and of fever there was an increaſe of 16; of which 46 complained—one of dyſentery; one of belly-ache, one of diarrhœa; eight of ſcurvy; one of rheumatiſm; one of ear-ache; one of epilepſy; one of eruption; one of ſcald; two of ſtrain; thirteen of contuſion; two of excoriation; ten of wound; one of inflammation; two of furuncle; three of abſceſs; and three of ulcer.—98 in all. Three of whom were ſent to the hoſpital; two for fever; and one for cough after fever.

Pains about the thorax, with cough, have been very general and urgent among the fever patients. The liberty men are very irregular. The Levanters prevailed greatly this month; and affected fever convaleſcents and the wounded men at the hoſpitals exceedingly, and all weakly people, of whom I was one.

The appearance of the wounds at the hoſpital very much altered for the worſe, and required dreſſing twice a day. The Surgeon informed me that his bark was nearly expended. I repreſented it to the Commodore, and he applied to the Governor, who ordered the Surgeon-general to ſpare a quantity for the hoſpital, and to take my receipt for it; which was done. The 12th. 391 men were ſent from Spain, in exchange for their ſick and wounded, which were ſent on ſhore when our fleet arrived; and they all came on board of our ſhip in a terrible condition from jails, and fatiguing journeys, many of them without a ſhift of clothes, and with infection about them. They were diſtributed among the ſquadron. Thoſe who were kept on board of our own ſhip were cleaned by having their old clothes thrown overboard, and being newly ſlopt. There were ſeveral ſurgeons' mates among them. 14th. I ordered the common doſe of bark on board to be reduced from ʒi. to ʒſs. and not to increaſe it unleſs I directed it. One of the aſſiſtants at the hoſpital ſeized with fever. 20th. Soft bread was ſerved to the ſquadron, much ſand in it. 21ſt. We haled out of the Mole. The progreſs of the infec-

tion can be eaſily traced from the ſick to the well, either by contagion or contiguity. 29th. Some men came over from Spain laſt night, and were treated as thoſe were on the 12th. I gave my ſcorbutic men vegetable acid, as prepared by Andrews.

Excepting part of the 17th; 25, 26, 30, and 31 when the wind was W and N W; it was E blowing at times in ſtrong flurries. 5, 14, 15, 23, 24, 27, and 28. The atmoſphere was cloudy or hazy ſeventeen days, and clear fourteen, though not ſucceſſively. The moon was new the 6th, and full the 20th. The mean height of the thermometer was 64. Only 10 complained of fever before the men came on board from Spain, ſo that the number of fever patients was greatly increaſed by the cartel men coming on board.—38 in the liſt at the end of the month—an increaſe of 28.

APRIL.

Forty-nine complained of fever; ſix of dyſentery; eight of ſcurvy; five of rheumatiſm; one of cough; one of ophthalmia; four of eruption; two of ſtrain; four of contuſion; one of fracture; one of wound;

one of inflammation; one of abſceſs; and four of ulcer.—88 in all. A decreaſe of ten on the whole, though the fever patients increaſed three. Two were ſent to the hoſpital; one for fever; and one for weakneſs, who came from it the day before. At the end there were 25 in the liſt.

The wind was from W to N W until the 16th; 17th, and 18th E, but variable; and continued between E and N N E until the 24th, when it became more variable, but was moſtly Northerly until the end. 26 and 27 we had calms. The atmoſphere was generally hazy or cloudy; clear ſeven days only. 26. 27.. Mean height of the thermometer 65. The moon was new the 14th, and full about the 19th.

The 5th. A boat came in from Barbary, and brought ſome fowls and ſome fruit. I got ſome lemons for my ſcorbutic patients. Three of four ſcorbutic men, who have taken Andrews's vegetable acid, are better. Wine ſerved to the people. The 6th. Part of the priſoners were ſent over to Spain; and all of them who were thought fit to be moved were ſent over the 8th; and ſeveral went who were unfit to be moved, of whom two died in the boats, and two after

they were landed. 11 of them were left very ill in the hoſpital. 10th. After having been on ſhore and overhaling ſome prize medicines, I found ſome bark, 24lb. which I gave to the Surgeon of the hoſpital, by the Commodore's permiſſion. I came on board extremely fatigued and very unwell. 12th. The 73d regiment is very ſickly, fever and dyſentery. The Surgeon, Mr. Cairncroſs, a very judicious man. I had a moſt dreadful paroxyſm of fever for five hours, during which I took a large doſe of cort. and ſal. ſuccin. twice. 13th. The Hyæna arrived from England laſt night. I found great debility, and my head much confuſed. 18th. Ten of the eleven priſoners left in the hoſpital are dead. 19th. Ended ſerving ſoft bread. My mate came off from the hoſpital. Sailed the 20th AM with the Hyæna, and next day at noon parted company from her. 22d. I was quite recovered. We ſpoke the Romney. The ſick had mutton broth for dinner. One of my ſcorbutic patients was very little better for taking ſix ounces of lemon juice daily for a number of days. 24th. I got a ſheep from our meſs for the ſick, of which I dreſſed a quarter a day for them. My lemon acid was

done, I began upon my orange acid. We fortunately got a few lemons out of a ſhip. On our ſailing from Gibraltar, I ordered the common doſe of bark to be ʒ i.

MAY.

Thirty-five complained of fever; one of dyſentery; one of belly-ache; ſixteen of ſcurvy; four of rheumatiſm; one of opthalmia; one of nephritis; one of eruption; one of itch; one of ſcald; two of ſtrain; eight of contuſion; two of wound; and two of ulcer.—76 in all. A decreaſe of 12, and of fever patients a decreaſe of 14; a very material alteration, though three died of fever, which is more than happened any month before, or while I belonged to the Edgar. One was taken ill 17th, and died 22d; one the 27th, but did not complain until the 28th, and died the 31ſt; the other complained the 26th ult. and died the 6th of June. Two were ſent to the hoſpital, the one a fever convaleſcent; the other complained the 24th of hæmorrhagia.—32 at the end of the month on the liſt.

The wind was between N E and N W the firſt week, and afterwards moſtly between W

and S W until the 13th, when the ſhip arrived at Spithead with 16 ſcorbutic men in the liſt. Had we continued a few weeks longer at ſea, many of the men would probably have fallen down. 9, 10, 11. 31., T L. The atmoſphere was generally cloudy, ſeldom clear, or hazy and very little fog. The mean height of the thermometer was 62 until the 13th. 1ſt and 2d. Some lemons were bought—out of a Swede which the Commodore would not let me pay for—for the ſick; and he ordered me what fowls or wine I wanted for them. 3d. The men had double allowance of wine for firing at a mark. 9th. Blowed very ſtrong, and wet. 18th. Sir Charles Hardy died, and his corpſe was carried from the Fountain in Portſmouth in great ſtate without Landport Gate, and put in a hearſe which was waiting for it. During the proceſſion, eight flag ſhips were firing half minute guns, and his own flag was half maſt down.

The moon was new the 4th, and full about 19th.

JUNE.

The fever patients increaſed five, though the liſt on the whole decreaſed 20. Forty complained of fever; three of ſcurvy; two of rheumatiſm; two of cough; one of ſore throat; one of ſtrain; three of contuſion; one of wound; one of abſceſs; and two of ulcer.—56 in all. Fewer than we have had any month ſince Auguſt. Two died of fever, the one on the 16th; he complained on the 29th ult. and had the violent hæmorrhage the 3d;—the other on the 27th; he complained the 8th, and deſpaired from his being firſt taken ill.—4 were ſent to the hoſpital, viz. one with fever; two with ſcorbutic ſymptoms; and one with ulcer.—25 were in the liſt at the end of the month.

1. T L, 2 T; 4, 10, 17, 18. 5.. The wind was E until the 8th, when it got to S W, and was chiefly between that and the N W until the 22d, except the 11th it was calm, as alſo the 23, 24, 25 and 26 it was calm; 27 and 28 from N E to E; and the 29th and 30th from W to S W. The atmoſphere was generally cloudy. The mean height of the

thermometer was 65. The moon changed the 3d, and was full about the 18th.

The 4th, 5th, and 6th were very cold for the ſeaſon. We ſailed the 8th, under the command of Admiral Geary, in company of 29 ſail of the line, and anchored P M in Sand-Down bay. 9th. A M we ſailed with the fleet. Our people were ſtill at three watches. The Commodore commanded the ſhip again as a private Captain. 11th. Cough was the moſt general and haraſſing ſymptom amongſt the fever patients. Portable broth made for the ſick with vegetables in it, which I bought. 16th. Three ſail of the line joined us. 17th. The infection is by no means ſubdued. One of my mates, a Lieutenant of marines, and the gunner had the fever. I ordered flummery for ſupper for the ſick.

20th. Some directions reſpecting the ſick were ſent on board the different ſhips by the Admiral, to be ſubmitted to the conſideration of the captains and ſurgeons. They contained one uſeful propoſal to exchange ſalt meat for wine with the purſer, and that to be given them as the ſurgeon ſees fit; but from the difficulty and trouble which would attend it, I fear, from experience, that it will not be-

come practicable. The iſſuing of wine to my own patients, I ſee, is attended with more trouble than moſt people will come into, and it would be ſtill more to adopt the propoſal. The keeping a wine book with the purſer, as well as with the people, the ſerving it in ſmall quantities to the ſick very often, and ſeeing it given to them, which muſt be done, employ a great deal of time, give great trouble, and oblige the ſurgeon and his mates to be almoſt conſtantly amongſt the ſick, when they are numerous. This was the cauſe of my mates being often ill, and of my being generally ailing, though I never lay by on board the Edgar.

In 1779, before the Edgar went to ſea, I wrote to a certain Lord on the ſubject of ſupplying each ſhip according to her rate with a proportion of wine for the ſick, at the expence of Government. The good effects of the plan would have been felt on ſervice: it would have given very little more trouble than we had, and the expence would never have been perceived to the country. 23d. One of my mates was ſeized with fever. 27th. The beer was out, and grog was ſerved to the people, with four waters.

JULY.

The liſt increaſed conſiderably, particularly the number of fever patients, which were 56; twelve of ſcurvy; one of rheumatiſm; one of giddineſs; one of nephritis; three of ſtrain; ſix of contuſion; one of fracture; one of wound; one of inflammation; and one accident happened. At the end, 37 were in it. An increaſe of 5.—84 complained in all.

The wind varied from N W by N to the E, except on the 3d, when it was W S W until the 27th, then variable between the W and S W; but it was much longer at N E than it was at any other point. The thermometer was never under 64, nor above 74. The atmoſphere was generally cloudy or hazy, ſeldom clear. The moon changed the 2d, full about 16th at night, and new the 31ſt.—1, 3, 5, 26, and 27. The weather was remarkably cold for the ſeaſon.

The 3d. we fell in with a French convoy, thirteen of which were taken. 5th. A man dropt over board out of the head, and was drowned. 6th. More bad fever caſes than we have had at any time for many months; and numbers have relapſed oftener than once, from

irregularity. A number of the well men get drunk with their grog. The ſhip is regularly ſmoked and dried with fires as uſual. 7th. I wrote the following letter to the Captain yeſterday.

"SIR,

"THE infection which has exiſted on board his Majeſty's ſhip under your command, ever ſince ſhe was manned, having of late become ſo virulent as to reſiſt the methods that were ſucceſsfully uſed formerly to check it; I beg leave to acquaint you, that it will be highly neceſſary to have recourſe to other means for that purpoſe; and to inform you, that the moſt effectual which I have ever experienced in a ſimilar caſe, are frequent ſmokings of the ſhip with tobacco. The tobacco ought to be well wet with vinegar, and laid on fires placed in tubs, having water and ſhot under them, and there ought to be no more fire than is ſufficient to light the tobacco, that it may ſmother away to aſhes. Seven fires will be requiſite for one ſmoking, and two pounds of tobacco at leaſt for each fire. All the ports ſhould be barred in, and the hatchways covered

with tarpawlings when the fires are lighted, and the ſmoke ſhould be thus confined for three hours at leaſt.

I am, Sir,

Edgar at ſea,
Aug. 17, 1780.

Your moſt obedient,
Humble ſervant,
R. ROBERTSON."

Captain Elliot, Commander of
His Majeſty's ſhip Edgar.

To which CAPTAIN ELLIOT returned the following Anſwer.

"SIR,

"I HAVE received your letter of this date, and have given directions to the purſer of his Majeſty's ſhip under my command, to ſupply ſuch quantities of tobacco, as you may from time to time think it neceſſary to demand for the purpoſe of ſmoking the ſaid ſhip, to check the progreſs of the infection therein, agreeable to your recommendation.

I am, Sir,
Your moſt humble ſervant,
JOHN ELLIOT."

Mr. Robertſon, Surgeon, Edgar.

8th. One died of fever, who was added the 3d. I prognoſticated his death the moment he firſt complained; and one of my mates was added with fever. Wine was ſerved to the ſhip's company. The diſcharge from bliſters is yellowiſh gelatinous ſerum, very viſcid. 10th. The maſter at arms was ſeized with fever from going down into the fore cockpit, while the ſhip was ſmoking with tobacco. 12th. It is obſerved that the waiſters, after-guard and marines are chiefly affected with fever. Two ſail of the line joined us. 6th. Half a cheſt of lemons was got out of a Swede, half of which I bought for the ſick. One of the gentlemen was ſeized with fever, from lying below while the ſhip was ſmoked with tobacco.

One diviſion of the well men aired their bedding every day by turns, for which there was a ſtanding order from my application to the Captain on the ſubject long ago, and the men were glad when it came to their turn. The ſick's bedding was aired every day, and the utmoſt care was taken to keep the ſhip clean, dry, and well ventilated.

Greater diligence to get the ſhip healthy and keep her ſo, could not poſſibly be exerted, than

than was by Captain Elliot and the firſt Lieutenant, Mr. Forbes, an old deſerving officer in the ſervice, who was pointed in executing the Captain's orders reſpecting the men's health. Every thing which I propoſed for that purpoſe was put in practice.

AUGUST.

Though the diſeaſes were few in number, the liſt increaſed greatly with ſcorbutic men—150 in all complained; 34 of fever, a decreaſe of 22; one of belly-ache; one of coſtiveneſs; eighty-nine of ſcurvy; one of epilepſy; one of ſcald; eleven of contuſion; one of ſtrain; one of excoriation; three of wound; two of inflammation; one of abſceſs; and four of ulcer. The general increaſe 65.—One died of fever 13th, of relapſe from miſconduct; one was ſent to the hoſpital for fever, and twenty-ſix for ſcurvy and other complaints to Haſlar and the ſick tent.

2d. The Inflexible and Buffalo joined us; the Captain of the former died on his paſſage. The fleet ſpoke a large outward bound convoy under the conduct of the Ramillies. The 3d I finiſhed my vegetable acid; it has been very

uſeful, but too expenſive for a ſurgeon to find. My mate recovered. 4th. One of the Lieutenants complained of fever. The fever convaleſcents became ſcorbutic. 11th. Three French ſhips were taken—wine was ſerved to the men. 12th. The Captain ſends me all the milk his cow gives, which I ſee divided among the worſt patients, with boiled rice and ſugar. I give the worſt ſcorbutic caſes lemon juice and ſugar with their wine; and I mix the wine of other patients with a ſort of beverage well fermented like mawbey, and ſerve it ſeveral times a day. 13th. We had a box of lemons ſent on board for the ſick, taken out of ſome prize, for the benefit of the ſick of the fleet. The Valiant joined the fleet. 16th. The Captain has been pleaſed to conſult me ſeveral times about the beſt method for managing the ſcorbutic men of the fleet when we get into port; and ſays, that he will call upon me for my opinion in writing, before we come to an anchor. 17th. I delivered my report of the effects of ſmoking with tobacco as follows:

"SIR,

"ON the 6th July laſt, when I repreſented to you that the infection was be-

come ſo virulent, as to render it neceſſary to have recourſe to other means than had formerly been uſed ſucceſsfully to check it, the number of fever patients on the ſick liſt was fifteen; and that for ſome days, before, had been increaſing by two or more daily. Since that period the ſhip has been ſmoked five times with tobacco, after the manner I propoſed, only adding ſulphur with the vinegar to prevent the tobacco from being embezzled, which it fully anſwered—And

" I have now the pleaſure to acquaint you, that the number of fever patients is reduced to four; and that four only have complained of fever for the laſt twelve days.

" Should you think proper to repreſent the matter to the Lords Commiſſioners of the Admiralty, I am of opinion, it might be productive of future benefit to the ſervice.

I am, Sir,

Edgar, at ſea, Aug. 17, 1780.

Your moſt obedient, Humble ſervant,

R. ROBERTSON."

Captain Elliot, Commander of his Majeſty's ſhip Edgar.

17th. Twenty men were preſſed out of a Weymouth privateer by our ſhip, and brought on board. 18th. I gave my opinion of the

method which I judged beſt for recovering the ſcorbutic men of the fleet, to the Captain in writing as follows:

"SIR,

"IN obedience to your deſire that I would communicate to you, what in my opinion is the moſt expedient method to recover the ſcorbutic patients, I am to acquaint you, my opinion is to lodge them on ſhore in good tents; to ſupply them daily with new baked ſoft bread, with a proportion of milk if poſſible; with vegetables in their broth every day; but in particular with half * an allowance of wine if they are ſerved beer; otherwiſe with a whole allowance, mixed with a proportion of lemon juice, and of brown ſugar or melaſſes, of which I would adminiſter ſo much at a time to each as I thought proper. I am, Sir,

Your moſt obedient,

Edgar, Aug. 18, 1780. Humble ſervant,

R. ROBERTSON."

Captain Elliot, Commander of
His Majeſty's ſhip Edgar.

* This quantity for the weakeſt patients would not be too much; and for other patients three, or even four times the quantity would not be too much, at leaſt for moſt of them.

As

As ſoon as the fleet came to an anchor at Spithead, the Captain went on board the Admiral and delivered my letter; a council was held by the Admirals and ſenior officers on the buſineſs, and the *ſpirit of this plan* was adopted, and put immediately into execution; but whether the minutiæ were, or not, I cannot ſay. Tents were immediately erected on ſhore, the ſcorbutic patients ſent to them, they were dieted nearly as I propoſed, and the Admiral's ſurgeon ſuperintended them. However, they were ſent with ſick tickets, and entered on the hoſpital books, as if they had been received into it.

Our ſhip's company had an extraordinary quantity of vegetables in their freſh broth, which was made every day for them while we remained in port.

31ſt. There were 13 in the liſt.

Until the 14th, the winds were chiefly Northerly and Eaſtward, and then S W until we got to Spithead on the 18th. The weather was moderate, though cold for the ſeaſon—8th, 9th, 12th, and 13th were calms, and 12th, 14th. The atmoſphere was generally hazy. The moon was full 14th P M.

The thermometer was not below 64, nor above 72.

The ſhip's company were paid prize money the 28th.

I was favoured with a liſt, ſtating the ſick on board the ſquadron laſt cruize; but as it is not complete, I think it would anſwer little purpoſe to inſert it. A number of the ſhips loſt men in the ſcurvy, though fortunately we loſt none on board the Edgar; and I thank God, I never in any ſhip have loſt a man by ſcurvy.

CHAP.

CHAP. IV.

A LIST *of the* SHIPS, *whoſe weekly Accounts were ſent to the Admiral, which were moſt ſickly when we arrived at Spithead, with the Number of the Sick.*

Ships' Names	Number of Sick	Remarks
Barfleur	95	
Britannia	187	
Royal George	52	
Edgar	90	—Every man with the ſlighteſt complaint was included in the Edgar's Sick Liſt.
Bellona	161	
Alexander	136	
Namur	75	
Queen	210	
Formidable	126	
Princeſs Amelia	158	
Union	83	—Theſe are the numbers ſtated in the weekly account, the week before we arrived; and as the number increaſed greatly the laſt week on board of the other ſhips, it is reaſonable to ſuppoſe they were proportionably increaſed on board of them.
Duke	94	
Ocean	100	
Dublin	80	

There were ſome very ſickly ſhips which either went to Plymouth, or were not given in when my Liſt was made out; but this can anſwer no other purpoſe, than to gratify curioſity; as I obſerved before of the liſt of men ſent to Gibraltar Hoſpital. No practical improvement can be founded on partial ſtatements. To expiſcate the truth, a faithful and complete regiſter is neceſſary, during the whole time a ſhip is employed. From partial ſtatements falſe concluſions are drawn, to the diſgrace of medicine, and the ruin of the ſervice.

CHAP. V.

The MONTHLY REVIEW *continued until the 7th of May*, 1782.

SEPTEMBER.

OUR ſick liſt decreaſed 77, as 73 only complained, viz. fifteen of fever; fifteen of dyſentery; one of coſtiveneſs; two of retching; five of ſcurvy; two of rheumatiſm; one of gout; one of head-ache; five of cough; two of ſore throat; four of epilepſy; one of eruption; one of itch; eight of contuſion; three of ſtrain; one of rupture; one of excoriation; one of wound; and three of ulcer; beſides one accident. One died of fever, whoſe death I predicted when he firſt complained; and one was drowned in getting a top-maſt up: and 32 in all were ſent to the tent and hoſpital, of whom ſeven were ſent unknown to me, and one of them was an invalid; two were ſent to a guardſhip for harbour duty, and four were invalided. There were fifteen in the liſt at the end of the month.

First day six were surveyed, and four of them invalided for gravel, consumption and old age; the other two were sent on board of a convalescent ship, their diseases called fits and rheumatism. 2d. Sent eleven convalescent scorbutics to the tent.—7 were sent to Haslar without my knowledge the 6th to be surveyed, of whom only four were in the list—one of fever; one of rheumatism; one of diarrhœa; two of contusion; one of ulcer; and one of rupture. These seven, and the six sent the 1st, should be deducted from 32, the total number of hospital cases. 9th. Two marines who were in the list were sent to quarters to be exchanged. Our men were brought off from the tent. 11th. Seven were sent to the hospital—three of scurvy; one of epilepsy; one of rupture; one of ulcer; and one of L. V.—some of them came on board the 9th from the sick tent. 12th. Captain Gower commands our ship, and we sailed under the command of Vice Admiral Darby, and anchored 13th at Torbay, where our people continued to enjoy fresh meat broth with vegetables daily. 16th. The Namur's and Ocean's men which came on board of us from the sick tent at Spithead, went on board

of their proper ſhips. 17th. A marine very ill complained of fever. 19th. Wine was ſerved to the ſhip's company, the beer being out. 20th. The marine added the 17th died in the night of fever. The fleet ſailed P M. 21ſt. We anchored at ſix P M with the fleet; and ſailed again about eleven with the Cumberland, Alexander, Invincible, and Porcupine. 23d. A man was drowned by falling overboard. Some of the fever caſes were exceedingly bad, and delirium very afflicting. Dyſentery affected more than in any preceding or ſucceeding month. Could this proceed from any other cauſe than the general debilitated ſtate of the ſhip's company by ſcurvy laſt month? A gentle emetic of ipecacuan, and a doſe of rhubarb, were all the evacuants which were uſed.

The cure was effected by opium, bark, and a few grains of rhubarb and ipecacuan occaſionally to keep the bowels open; and in ſlight caſes by the two laſt with opium only.

Hence, inſtead of dyſentery being always inflammatory, and requiring the antiphlogiſtic treatment, it is often a conſequence of debility, which ought to be treated in a con-

trary way: as appears very obvious from my patients being thus treated and all recovering.

The thermometer was not under 60 nor above 68 until the 29th, when it was 58. The moon was full 13th, and new 29th. The atmoſphere was generally cloudy. The wind was very variable from the 12th to the 19th, but chiefly Southerly. 20, 21, N; 23d. S from the 24th to 29th, W, and then NW. From the 21ſt it blowed ſtrong all the month. 19, 23, 24, 27, 29, TL. 15, 20, 26, 28, 30.. 17.. .

OCTOBER.

The number of patients decreaſed to 54, but 20 complained of fever; one of dyſentery; one of coſtiveneſs; one of diarrhœa; two of ſcurvy; four of rheumatiſm; one of head-ache; one of cough; one of ear-ache; one of ophthalmia; one of blindneſs; one of diabetes; one of impetigo; one of ſcald; nine of contuſion; one of ſtrain; one of fracture; one of wound; two of inflammation; one of furuncle; and two of ulcer. Sent 7 the 21ſt, and 4 the 25th, to the hoſpital;—11 in all, viz. one of fever; two of cough; three of rheumatiſm; two of epi-

lepsy; one of diabetes; and two of ulcer. On the 31st there were 22 in the list, an increase of 7. Until the 8th the wind was W, then E for a little returning suddenly to the W, and continued till the 14th, then variable, but soon fixed at S W to the 18th; it was variable, but again got to the W, and so continued until 26th, and afterwards between the N and E to the end. The atmosphere was chiefly hazy or cloudy. 3, 7, 10, 12, 13, 14, 16, 17, 18, 19, 20, 21. 6, 8.. The moon was full 13th, and new 27th.

Melasses was served to the people as part of their oatmeal. 18th. We anchored in Plymouth Sound: the weather during the cruise was exceedingly bad, blowing constantly. 1, 6, 8, 10, and 16th it blew very hard. Only the Cumberland of our little squadron could keep the sea; the rest were disabled. Several of the fleet lying in Torbay sustained some damage. 20th. We began to serve beer to the people. 26th. We sailed with the Cumberland, and joined the fleet, consisting of 23 sail of the line under the command of Vice Admiral Darby, next day.

NOVEMBER.

The number of fever patients increaſed to 23; there complained beſides two of dyſentery; one of belly-ache; one of ſcurvy; two of rheumatiſm; two of cough; one of ſore throat; one of deafneſs; one of nephritis; three of eruption; ten of contuſion; one of ſtrain; one of excoriation; and one of inflammation—50 in all, a decreaſe of 4; and at the end of the month there were only 19 in the liſt, a decreaſe of 31 which I conſidered as a remarkably healthy ſtate after cruizing ſo long at this ſeaſon.

The wind was between the E and N until the 16th, except the 13th N W. 17th. S W, and then until 22d between W and N W, and N until the 26th, then variable two days, and again eaſterly to the end. 1, 2, 21, and 22 it blowed ſtrong; and a heavy gale 20th. 23d was calm; 1, 2, 3, 4, 5, 7, 8, 15, 16, 17, 18, 19, and 20. 21, and 22. The atmoſphere was generally cloudy; ſeldom foggy, and ſometimes hazy. The thermometer was not below 50, nor above 62, though there was a fire ſometimes in the ward-room.

The moon was full the 12th, and changed the 26th.

8th. The beer was out, and wine was ſerved to the ſhip's company. 20th. We loſt company of the fleet. 21ſt. A fever patient fell out of his hammacoe, and lay in the lee ſcuppers in the wet laſt night, ſome time, before the negligent ſentinels obſerved him. 27th. The Captain and ward-room meſs bought half a cheſt of lemons out of a ſhip. 28th. We joined the fleet. I hear the Britannia's people are becoming ſcorbutic. 30th. The Jupiter made the ſignal for ſeeing a ſtrange fleet. All the ſick, except the man who fell out of his hammacoe and was dying, were moved down into the cable tiers.

DECEMBER.

The number of ſick increaſed one; but the number of fever patients decreaſed thirteen; ten only having complained of fever; one of belly-ache; one of pain of the ſtomach; five of ſcurvy; four of rheumatiſm; five of head-ache; three of cough; five of ſore throat; one of hæmorrhage; two of deafneſs; one of ear-ache; one of itch; three of con-ſion; two of ſtrain; one of wound; three

of inflammation; one of abſceſs; and one of ulcer; and one accident which proved fatal 1ſt of January.—51 in all. And only 20 in the liſt at the end of the month, after having been near fifteen weeks at ſea.

The wind from the 1ſt to the 10th was between the E and S ☉; the 11, 12, 13 V with ☌14, and 15 from S to S W ☾ and ☌; 16th V ☾ from the 17th to the 22d E ☉ then until the 26th from N to N E ☾. 27 S W and W until the end of the month. The atmoſphere was ſometimes hazy; but generally cloudy. 30, and 31 rather foggy. 2, 3, 17, 18, 30, and 31. 19, 20, 21, 22, 23, and 24, froſt. The moon was full the 10th, and changed the 25th. The thermometer was between 44 and 64. The 1ſt the Fortitude joined the fleet, and made the ſignal for ſeeing a ſtrange fleet. The fever patient who fell out of his hammacoe the 21ſt ult. died. 5th. A ſignal was made for a fleet in ſight. 9th. The Bellona joined the fleet. 14th. I had a bad cold; a privateer was taken. 15th. We were off the Land's End. 17th. The Admiral haled down his flag and made the ſignal for the fleet to make, each, the beſt of their way to Spithead. 21ſt. We

anchored at St. Helens, and on the 22d at Spithead, after a long winter's campaign. Snow on the ground. We heard that orders were iſſued to take Dutch ſhips. 24th, Die Sabbati, we ſailed in company with the Formidable, Active, and Maidſtone. 25th. The Warwick joined company with us. 26th. P M the ſquadron agreed to ſhare equally in prize money from the day of our ſailing, until we all arrived in ſome Engliſh port. The agreement was confirmed by a gun being fired from each ſhip. 28. A violent accident happened. 31. We preſſed nine men out of a privateer.

JANUARY, 1781.

The number of patients increaſed to 66, and thoſe of fever more than double—21 having complained; two of belly-ache; one of diarrhœa; two of ſcurvy; one of rheumatiſm; one of head-ache; ſix of cough; five of ſore throat; one of ear-ache; one of epilepſy; one of nephritis; one of diabetes; one of eruption; eleven of contuſion; five of ſtrain; one of excoriation; two of inflammation; and three of ulcer. The man died of the accident of the 28th ult. and 7 were

were ſent to the hoſpital—one of ſcurvy; three of cough; two of rheumatiſm; and one of diabetes.—27 on the liſt at the end of the month. The wind between the 1ſt and 4th varied between W N W and N N E; then was S W until the 7th; from the 8th to the 17th between N W and N E; from 17th until the 22d, between S W and N W. 22d E, and afterwards N. 5, 6, 7, hazy; 8 clear; 17 and 18 froſt, and the reſt cloudy. 1, 2, 17, 18, 20, 21. 22. . from the 8th to the 17th froſt. The moon was full the 8th, and changed the 24th. The thermometer was not under 44, nor above 58, that I obſerved.

2d. Wine was begun to be ſerved to the people. 3d. One of the privateer's men complained of fever. 5th. The Warwick took in ſight a large Dutch ſhip, the Rotterdam of 50 guns. 6th. A hundred of the priſoners with ſome of the officers ſent on board of us; and we ſent 3 midſhipmen and 20 men on board of the prize. Our people were ſerved grog. 7th. We arrived at St. Helens with the Warwick and prize. 8th. We anchored at Spithead. 14th. We ſailed, and anchored the 15th A M in Plymouth Sound. 15th, Six complained of fever from irregularity. 17th. Five men whom we ſent to the hoſpital here

on the 21ſt of October, are returned as bad as when they went. I was abſent from the 11th to the 19th. 22d. The Captain has the gout. 24th. The men who came from the hoſpital 17th, ordered to be ſurveyed, and were again ſent to it on the 26th.

FEBRUARY.

The ſick liſt decreaſed three only, though the number of fever patients were but 13; one of eryſipelas; two of dyſentery; one of ſcurvy; two of rheumatiſm; thirteen of cough; two of ſore throat; one of ſuppreſſion of urine; one of eruption; two of ſcald; ten of contuſion; one of ſtrain; one of diſlocation; three of wound; three of inflammation; one of abſceſs; and ſix of ulcer.—63 in all. Five were ſent to the hoſpital, viz. one with fever; one with ſcurvy; two with cough; and one with ulcer. One of the lieutenants of marines was one of the patients ſent for cough—33 on the liſt at the end of the month.

The ſhip returned to Spithead.

MARCH.

The number of ſick increaſed greatly; and above triple in fever patients—41 of whom

plained; one of peripneumony; two of belly-ache; one of pain of the ſtomach; three of rheumatiſm; one of head-ache; ſeventeen of cough; eight of ſore throat; one of conſumption; two of eruption; two of ſcald; ſeven of contuſion; three of ſtrain; one of rupture; two of fracture; two of wound; ſix of inflammation; four of abſceſs; and nine of ulcer.—113 in all.

Two died—one of peripneumonia, or pleuritis; and the conſumptive patient; and 8 were ſent to the hoſpital, viz. two for fever; one for rheumatiſm; one for fracture; one for contuſion; and three for ulcer: beſides three who were ſurveyed; one for old ſcorbutic ſymptoms, invalided; and two with ſcorbutic ſymptoms ordered for harbour duty. At the end of the month there were 30 in the liſt.

13th. We ſailed with 27 ſail more of the line under the command of Vice Admiral Darby, and Rear Admirals Digby and Sir John Roſs, Captain Gower ſtill commanding our ſhip. 14th. One complained of fever who came on board with nine more from a tender, and brought freſh infection along with them. It deſerves notice, that ſix only

complained in the preceding 13 days; and that excepting the 30th not a day escaped without one or more patients complaining of fever. The danger of taking men out of a tender without having them thoroughly cleaned and newly slopt, is very great; and ought therefore to excite universal attention on board of a ship; because there is no saying whose life may not be involved in the consequence. Melasses was served for half the oatmeal. 20th. The fleet made Cape Clear, and we cruised off and on. 21st. Wine, and the 26th grog was served to the people. Crout was served occasionally. 27th. The victualling convoy appeared and joined us from Cork. An uncommon phenomenon appeared last night in the sky. A boy swallowed a shilling without any bad consequence ensuing from it. 30. Six French prisoners were sent on board, who belonged to a privateer which the Cumberland took.

The wind from the 13th to the 18th, between N E and E. 18th and 19th, variable; until the 22d, W S W; again became variable, 22d; then E until the 25th; when it was from S to W N W; then from N E to E S E until the end, but variable. 28 and

29 it

29 it blowed ſtrong; the weather was otherwiſe moderate. 28. S. 29. H. 30. The atmoſphere was chiefly cloudy or hazy, and very little clear weather. The moon was new the 14th. The thermometer was not below 46, nor above 65.

APRIL.

The number of ſick decreaſed to 68; and the fever patients to near one third, fourteen only having complained of fever; one of belly-ache; one of ſcurvy; three of rheumatiſm; three of head-ache; one of cough; four of ſore throat; ſeven of ear-ache; one of eruption; four of ſcald; eight of contuſion; one of ſtrain; one of diſlocation; four of wound; four of inflammation; one of abſceſs; and ten of ulcer.—23 in the liſt at the end of the month.

9th. Wine was ſerved to the people. 11th. A man who lay on board the Creſcent lately complained of fever. 12th. A M we arrived at Gibraltar together with the St. Alban's, Courageux, and Medway, and the convoy. The Flora went up to Minorca with the convoy, and the reſt of our fleet cruiſed in the bay and gut. As ſoon as we anchored, the

enemy began to fire on the town and ships. 14th. The Alexander came in and anchored, with Sir John Ross on board to superintend the landing of the provisions and stores. Our ship weighed anchor P M, and stood off and on in the bay, which we did most nights until the 20th, when we sailed with the fleet. 16th. Grog was served to the people. The gun boats annoyed us daily, and wounded men on board the frigates. The surgeon of the 58th was wounded in both legs by pieces of a shell; the one was fractured, and the other was amputated. 20th. Seven passengers, women and children came on board of us, and numbers have gone on board of other ships, every one being beat out of the town by the enemies shot and shells, and were obliged to encamp on the hills over the South barracks. We sailed with the fleet.

The wind was from N E to N W, from thence to S W, backed to N, afterwards variable. It then got to the W, and between it and N; then E; again between W and N W, returned to the E, and was between N E and S E until the end. The atmosphere varied between cloudy and hazy, seldom clear until near the end of the month. 2, 7, 12. 17.

The

The moon was full the 8th, and changed 23d. The thermometer was never below 54, nor above 68. Nothing particular occurred.

MAY.

Thirty-eight only complained this month, viz. eight of fever; one of belly-ache; one of pain of the ſtomach; one of ſcurvy; five of rheumatiſm; one of head-ache; two of hæmoptoe; one of conſumption; one of deafneſs; one of ear-ache; one of hæmorrhoides; one of eruption; one of ſcald; three of contuſion; two of ſtrain; one of rupture; one of fracture; one of excoriation; three of inflammation; and two of ulcer. The conſumptive patient died, and at the end of the month 14 were in the liſt, ſo that the decreaſe was great and general.

The wind was between S E and E until the 9th, then N, though variable until the 16th; it then got W until the 20th. then to S S E, and continued S until the 26th, and afterwards varied between the E and S W until the 31ſt. 5. 8. 10. 17. 4. 7.. and very bad weather. The atmoſphere was cloudy or hazy. The thermometer was not

below 54, nor above 64. The moon was full the 7th, and new the 23d.

The convaleſcent fever patients relapſed during the bad weather, and the conſumptive patient, who before ſeemed to be recovering, died the 23d AM, ſuffocated with blood in a fit of coughing, the 76th day of his complaining of cough, to which he had been long ſubject. It rarely happens that ſeamen become phthiſical without having been previouſly hurt about the thorax, which they have too long neglected. Among thoſe who have had ſhip fever, more have had pulmonic affection than any other ſymptom; but this differs widely from either pleuritis or phthiſis pulmonalis, as it is cured by cortex; and in the former, cortex is the moſt improper medicine, and in the latter it has never been known to ſucceed. By the bye, at what period is phthiſis inflammatory, and when does it become aſthenic?

4th. Grog was ſerved to the people, and wine on the 8th. We got ſome lemons and oranges out of a Portugueſe ſhip. I hear that the fleet in general is pretty healthy, except the Bellona, Cumberland, and Marlborough. The Bellona, I am told, has

buried 27 men ſince we left England, and has 108 on the ſick liſt; that the Cumberland has buried 15 ſince we left England, and is very ſickly. I have ſince learned, after ſhe returned to England in June (beſides 14 that died between England and Gibraltar), that 40 of the Marlborough's men died at the hoſpital. 16th. Our wine was out, and the laſt of the rum was ſerved. 17th. We were ſupplied with a fortnight's ſpirits from the Britannia. We heard of the French fleet being out in detached ſquadrons, and having taken our St. Euſtatius convoy. Rear Admiral Digby, with eight ſail (of which our ſhip is one) of the line and two frigates, was ordered to cruiſe off Uſhant a fortnight. The Nonſuch two days ago, when it was her look-out, had 70 men killed and wounded in an action with a French line of battle ſhip. Our paſſengers were ſent on board the Royal George, going into port with the reſt of the fleet; with which we parted off the Land's End. 20th. The Medway and Repulſe joined us. 21. A man who lay on board the Creſcent, and had the fever, relapſed a ſecond time. The Repulſe and Prudente parted from the fleet. 27 PM we chaſed and ſpoke three

ſail of the line and one frigate, of Ruſſian ſhips, from Liſbon. 28. I hear that the Prince George, Admiral Digby's ſhip's company are remarkably healthy, but they are always ſerved either wine or beer. But no ſhip was more healthy than the Edgar. Great pains were taken to keep the ſhip and people clean and active; and temperance was enforced by puniſhing irregularities. One diviſion of the people continued to air their bedding and clothes every good day; and the ſick or convaleſcents every day regularly.

The antiphlogiſtic method of treating the fever prevails, as uſual, in the fleet.

JUNE.

The number of ſick increaſed greatly; eſpecially of fever, of which 22 complained; two of ſcurvy; two of rheumatiſm; three of headache; one of cough; two of ſore throat; one of epilepſy; three of ophthalmia; two of hæmorrhoides; one of ſcald; thirteen of contuſion; three of ſtrain; one of excoriation; one of wound; one of inflammation; one of diſeaſed teſticle; one of furuncle; one of cancered lip; and one of ulcer;—62 in all. Four were ſent to the hoſpital; one for

fever; two for rheumatiſm; and one lame and convaleſcent fever.

There were 26 in the liſt at the end of the month; a conſiderable increaſe. 3d. We arrived in Plymouth Sound, after being 81 days out of port; for Gibraltar was no port to us, as we were under ſail moſtly all the time we were there. 7th. I went aſhore on leave. 11th. Captain Gower was ſuperſeded by Captain Elliot. 12th. The ſhip ſailed with the ſquadron, commanded by Admiral Darby and Sir John Roſs, and conſiſted of ten ſail of the line. Four patients with ophthalmic complaints, who have been venereals; I never met with the like circumſtance before. The Queen was a very ſickly ſhip during the cruiſe.

The wind in the beginning was W, and from the 12th to the 26th between the W and N; then E one day. It got back to W 27th, and afterwards was between NNE and E to the end. The atmoſphere was often hazy, ſometimes cloudy, and clear 27, 28, and 29. 5, 16. The moon was full the 6th, and changed the 21ſt. The thermometer was not below 60, nor above 66.

The irregularity of a ſhip's company in port, generally depends on what money and credit they have; and the number of chirurgical caſes always, I may ſay, in port depends on irregularity: and this, too, is frequently the cauſe of rouſing dormant infection, though that is more generally brought, or excited, on board by men entering from the hoſpital, or other ſeminaries of infection; or from men viſiting on board of ſickly ſhips, or people belonging to them viſiting on board of healthy ſhips.

JULY.

Thirty-eight only complained in all; ſo that the liſt decreaſed greatly; and 12 only complained of fever; two of pleuritis; one of belly-ache; one diarrhœa; one of retching; one of indigeſtion; one of ſcurvy; three of head-ache; three of ſore throat; one of ophthalmia; one of nephritis; one of ſcald; five of contuſion; two of ſtrain; one of white ſwelling; one of furuncle; and one of ulcer. Fifteen were ſent to the hoſpital, viz. Two convaleſcent fever patients; one with head-ache; two with ſcurvy; one with rheumatiſm; one with cancered lip; one with white

ſwelling; one with ſchirrous teſticle; five with ulcer; and one with L. V.—11 in the liſt at the end of the month.

2d. The Sultan and Magnanime paſſed with a convoy to the Weſtward. 3d. The beer was out, and half the allowance was ſerved of wine. 7th. We arrived at Torbay; and next day got freſh beef and greens off for the people. We ſailed at noon, and arrived the 9th at Spithead.—25 on the ſick liſt; but including venereals and other ſlight caſes to whom medicines are given, 58 is the number reported in the weekly account. 14th. Prize money was paid to our people. 19th. We ſailed under the command of Vice Admiral Darby and Sir John Roſs. 20th. Captain Elliot again hoiſted a broad pendant, and Captain Boſton was appointed to command the ſhip. 21ſt. The fleet conſiſted of twenty-one ſail of the line. 24th. Admiral Digby with three ſail of the line joined us. Melaſſes with ſour crout ſerved to the people as uſual. 26th. We ſaw ſeven ſail of the line of Ruſſian ſhips. 30th. The Lively retaken, and two brigs taken from the French. Two of the fever patients in the liſt came from the Warſpite guardſhip in the harbour.

The wind veered from ENE to S, SSW and W, from thence to NW, and from between NE to N; and at laſt to W. 3 and 8. 6, 7.. T. The moon was full the 6th. and changed the 21ſt. The thermometer was not below 62, nor above 72. The atmoſphere varied between cloudy and hazy, and ſometimes was clear.

AUGUST.

The number of ſick was leſs than in any month I was on board the Edgar; and only 7 complained of fever; one of abdominal obſtruction; one of ſcurvy; three of headache, one of epilepſy; one of hæmoptoe; two of contuſion; one of excoriation; three of wound; two of furuncle; two of ulcer; and an accident; a boy killed.—25 in all; and only 7 in the liſt at the end of the month.

The wind was chiefly N, though variable, and calm part of 6th and 7th, until the 9th, when it was variable until the 12th; then N until 16th; then E; the 17th W, from N to NW until 20th. E 21. S until the 25th. W until 30, and from SE to SW afterwards. 21ſt and 23d calm at times. 28th. It blowed

a freſh gale. 1, 4, 5, 6, 14, 18, 19, 24, 25, 26, 27 and 30. 28.. and dews, generally in the night. The atmoſphere was either hazy or cloudy, very ſeldom clear. The thermometer was never below 63, nor above 78, which was the afternoon of the firſt. 1ſt. Admiral Digby on board the Prince George parted company from us laſt night; he is going to command in America. The La Prudente joined us; ſhe took three prizes coming out. 3d. The beer was out, and wine was ſerved to the ſhip's company. 8th. A boy was killed by a fall down the main hatchway. 10th. The men were ſerved grog. 15th. Wine was ſerved to the people. 16th. A brig brought diſpatches to the Admiral. 17th. We were informed of the combined fleet being out and ſpoke with. 20th. Captain Boſton very ill of fever, though he does duty. 21. The Commodore ſtruck his pendant, and went and hoiſted it on board the Victory; he took one lieutenant, five midſhipmen, his ſecretary, and ſervants. Twenty priſoners were ſent on board of us. We learned that the combined fleet conſiſts of 56 ſail of the line, and of Admiral Parker's action with the Dutch. 25th. We arrived with the

fleet in Torbay, and heard that the combined fleet was off Scilly. 27th. Freſh beef ſerved to the fleet. Our people had broth every day, and ten ſhillings was allowed for greens every day. 28th. The bad weather forced the French in for ſhelter.

SEPTEMBER.

The liſt increaſed nearly double—46 having complained; viz. fourteen of fever; one of dyſentery; five of belly-ache; one of indigeſtion; two of ſcurvy; one of rheumatiſm; one of head-ache; one of cough; one of ophthalmia; one of tooth-ache; three of eruption; ſeven of contuſion; one of concuſſion of the brain; one of ſtrain; one of fracture; two of wound; one of inflammation; and two of ulcer; and fifteen were on it at the end of the month.

There were light variable winds until the 11th; then E N E two days; W, 13th; light and variable until the 17th; then N until the 19th; then between N W and N until the 26th, when it was variable; 27th N; 28th E N E and variable with calms to the end. 24th. It blowed a freſh gale. The atmoſphere was either hazy or cloudy. 4, 5, 17, 22,

22, 23, 24, 25, and 27; 11th dew; 15th T and L. The moon was full the 2d, and changed the 17th. The thermometer was not below nor above 72, unleſs the ſun ſhone on it.

1ſt. We ſhifted our berth, to form a creſcent with the fleet. 3d. The Agamemnon and Prothée came in. 5th. The Arrogant came in, very ſickly. 6th. The Hercules came in. Began to ſerve beer to the men yeſterday. 10th. The beer was out, and wine was ſerved to the people. We were ordered 15 tons of beer, and three caſks of ſour crout; but of the former we did not get twelve, and none of the latter—one ſhip having taken more than double the quantity ordered. This ſelfiſh and illiberal cuſtom injures the ſervice very materially, inſtead of promoting it. For ſome little time our decks below have not been dried as uſual with fires when waſhed. The conſequence is, the number of fever patients increaſes. The Commodore returned with his retinue, and hoiſted his pendant again. Admiral Kempenfelt hoiſted his flag on board the Victory. 11th. Victuallers came in. The men ſcrubbed their hammacoes laſt night, though the weather was very damp; and

more of them complained of fever. 12th. I was ſlightly infected laſt night in the ſick berth. 14th. His Royal Highneſs the Duke of Glouceſter was on board of the Admiral's ſhip laſt night. The fleet ſailed A M. and anchored again P M. 15th. The fleet ſailed, conſiſting of 27 ſail of the line. If I was not miſinformed, the Arrogant was ordered into port on account of ſickneſs. 27th. Grog was ſerved to the people, and we had no wine for the ſick.

OCTOBER.

The number of patients decreaſed; thirteen complained of fever; one of belly-ache; one of diarrhœa; one of ſcurvy; three of rheumatiſm; three of head-ache; one of cough; two of ophthalmia; one of nephritis; one of ſcald; three of contuſion; three of ſtrain; two of wound; two of furuncle; one of abſceſs; and one of ulcer:—in all 39, and 22 in the liſt at the end of the month.

The wind was variable and calm at firſt; and then between S E and E until 6th; then between S and W until the 14th; then N two days, when it became light and variable until the 19th; then N until the 23d; again N and

N and calm; and then from NE to N, and Weſtward of N to the end. 9, 10, 14, 16, 17, and 29 H. 29 and 30 it blowed freſh gales. The atmoſphere was chiefly cloudy. The moon was full the 2d, and changed the 17th. The thermometer was not below 58 until the end of the month, when it got to 49, nor above 64.

1ſt. Wine was ſerved to the people. 9th. The ſour crout was all ſerved. 19th. I felt rheumatic pains. We were ſo near the land about Cape Clear, that boats came off with potatoes and things to ſell. 21ſt. Sir John Roſs on board the Royal George, with the Foudroyant, Dublin, and Emerald, being very leaky, parted company to go into port to repair. 22d. I got ſome prize wine for, and began to ſerve it to, the ſick. 24. The three diviſions of the fleet ſeparated; the Commodore had charge of the third. 25. We loſt ſight of the other diviſions. 26. Saw the van diviſion. 30. On my application we got 43 men out of a Cartel ſhip from Spain, on board of which there were thirty ill of fever. I had the recruits ſtript naked, well waſhed in a tub and pumped on; clean ſlops put on them, and all their

old clothes hove overboard; and I ordered a doſe of bark for each of them.

NOVEMBER.

The ſick liſt increaſed, chiefly with fever patients, of which 29 complained;—two of pleuriſy; one of belly-ache; two of ſcurvy; three of rheumatiſm; one of head-ache; one of ſore-throat; one of epilepſy; one of tooth ache; one of nephritis; one of eruption; eleven of contuſion; one of ſtrain; one of excoriation; one of fiſtula in ano; and two of ulcer:—in all 59.—To prevent the new infection from ſpreading, 30 were ſent to the hoſpital, viz. twenty-one for fever, nineteen of whom were Cartel men; another who meſſed with them, and one who had been ill before;—one for abdominal obſtruction; three for rheumatiſm; one for epilepſy; one for concuſſion of the brain, and conſequent weakneſs; two for contuſion; and one for ulcer. At the end of the month there were 14 in the liſt.

The wind was W the firſt day, and we arrived at Spithead the ſecond day.

Our people were paid both wages and prize money, and were very irregular.

Notwith-

Notwithſtanding the care I took to prevent the Cartel men from having fever, they were ſo ſtrongly infected before they came on board, that nearly one half of them were ill; and though our men were uncommonly irregular, not one was ill of fever, but the man who meſſed with the Cartel men, and one relapſed caſe, ſo effectually was the old infection ſubdued on board.

DECEMBER.

The number of patients decreaſed very little, 21 having complained of fever; three of pleuritis, two of whom had formerly been hurt; two of rheumatiſm; one of head-ache; four of cough; three of ſore throat; one of eruption; one of itch; three of ſcald; nine of contuſion; two of ſtrain; and three of inflammation; and one accident:—54 in all. 5 were ſent to the hoſpital and ſick quarters, viz. one for fever; one for rheumatiſm; one for head-ache; one for cough; and one for fiſtula in ano.

The wind was E, then variable; N W for a ſhort time; then between S S E and S; then variable; and returned to S; continuing between that and S W until we returned to

Spithead. 8, 13 and 14. 6, 7, and 12.. The atmoſphere was either cloudy or hazy; and foggy the 12th and 13th. The thermometer was not below 50, nor above 64. The moon was full the 1ſt, and changed the 15th. 2d. We ſailed under the command of Rear Admiral Kempenfelt with eleven ſail of the line, and one of fifty guns. 11th. The Ocean joined us. 12th A M a numerous fleet of French ſhips in ſight. About noon we ſtretched between the enemy's ſhips of war, and thoſe under their convoy, along with which were two or three line of battle ſhips; one of them paſſed cloſe acroſs our forefoot, and fired many ſhot into us, leading our ſquadron, without hurting a man. Several ſhot wounded the hull and maſts, and cut our rigging. Many of the convoy ſtruck to us as we paſſed them, or as they paſſed us; but from their not being immediately boarded and taken poſſeſſion of, numbers bore up and joined their ſhips of war to leeward. 19 ſail of the heavieſt ſhips of France, and two armée en flute in the enemy's line. 14th. The Agamemnon and La Prudente were diſpatched to dog the enemy's fleet, of which the former picked up five ſail. The Arethuſa was ſent into port; and the

fireſhip to the Weſt Indies with information of the enemy's fleet, and tranſports, &c. bound there. 15th. Fifty priſoners were ſent on board of us. 16th. Wine was ſerved to the people. One of the enemy's convoy was ſunk on the 12th by one of our ſhips. 19th. One of our men fell over board and was loſt. 21ſt. We arrived at Spithead.

JANUARY.

Twenty-four complained of fever; five of pleuritis; one of dyſentery; one of cough; two of ſore throat; one of epilepſy; one of nephritis; one of hæmorrhoides; one of eruption; ten of contuſion; four of wound; one of fracture; one of inflammation; and two of ulcer:—55 in all; and 6 were ſent to the hoſpital, viz. four for fever; one for rheumatiſm; and one for contuſion. 25 in the liſt at the end of the month.

One man broke his left fibula, and one of the ſentinels ſhot off his left fore-finger by the piece going off accidentally.

The ſhip was docked in Portſmouth harbour.

FEBRUARY.

The ſick liſt decreaſed, particularly in fever patients; of whom only 17 complained; one of peripneumony; two of pleuritis; two of rheumatiſm; one of ſore throat; one of eruption; two of itch; ten of contuſion; ſix of wound; one of inflammation; two of abſceſs; two of ſcald; and three of ulcer.—50 in all. 4 were ſent to the hoſpital: one for fever; one for rheumatiſm; one for cough; and one for contuſion. Twelve in the liſt at the end of the month. I was ſeized with a violent rheumatic pain, from walking in a very cold night acroſs a field.

MARCH.

The number of patients on the whole increaſed, but 15 only complained of fever; one of pleuritis; two of rheumatiſm; one of cough; three of ſore throat; one of ſuppreſſion of urine; one of eruption; twelve of itch; four of ſcald; one of contuſion; four of ſtrain; one of fracture; four of wound;

one of inflammation; and two of ulcer.—53 in all. Three were ſent to the hoſpital, viz. two for cough; after fever one; and the other old; and one with fracture of the thigh. 7 in the liſt at the end of the month. 8th. Captain Boſton left the ſhip, and was ſucceeded by Captain Moutray.

APRIL.

The ſick liſt increaſed, and the number of fever patients to 18;—three complained of pleuritis; one of pain of the ſtomach; one of belly-ache; two of head-ache; ſix of cough; two of ophthalmia; one of blindneſs; one of nephritis; two of hæmorrhoides; eighty of itch; fourteen of contuſion; one of ſtrain; two of wound; one of inflammation; and three of ulcer; and one accident.—139 in all. Sent 9 to the hoſpital, viz. one with fever; one with rheumatiſm; one with blindneſs; one with contuſion; and five with ulcer. Fourteen were in the liſt at the end of the month.

We went out of the harbour, and ſailed 13th with Admirals Barrington and Kempenfelt, and the Commodore; the ſquadron con-

ſiſted of 12 ſail of the line. 15th. The Queen and Artois joined us. 20th. We fell in with three ſail of French ſhips of the line and two frigates, with a convoy. Le Pegaſe, one of the line of battle ſhips, was taken by the Foudroyant, and a number of the tranſports by the other ſhips. Had we been ſo fortunate as to have fallen in with them in the morning, inſtead of evening, moſt probably all of them would have been taken. 21ſt. About 50 of the priſoners were ſent on board of us. 25th. The ſquadron arrived at St. Helens, and on the 26th at Spithead with the Pegaſe.

The wind was extremely variable during the ſhort cruiſe. The moon changed the 12th. Part of the 16th, 17th, and 18th, the atmoſphere was clear, and cloudy or hazy the reſt of the cruiſe. 21, 22, and 25. 23 and 24.—The thermometer was not lower than 51, nor higher than 62.

MAY.

Three complained of fever; one of rheumatiſm; two of ſcald; two of contuſion; and one of ulcer:—9 in all when I left the

ſhip on the 7th, and there were only twelve on the liſt, beſides a few ſlight lame complaints.

Three were ſent to the hoſpital, viz. one with fever; one with cough; and one with ulcer.

CHAP. VI.

TABLE.

The MONTHLY STATE of the SICK LIST from the 1st of July 1779, until the 7th of May 1782. The Numbers who, and of what Diſeaſe they died; the Numbers, and for what Diſeaſe ſent to Hoſpitals; and the Event of Fever Caſes ſent to Hoſpitals.

Years	1779						1780												1781												1782					Number of Diſeaſes	Deaths on Board	Sent to Hoſpitals	Deaths at Hoſpitals	Remarks
DISEASES	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May					
Fever	1	5	29	59	61	36	28	30	46	49	35	40	56	34	15	20	23	10	21	13	41	14	8	22	12	7	14	3	29	21	24	17	15	18	3	869	9	58	6	
Meaſles				3	4	2															1								2	3	5	3	1	3		9	1			
Pleuriſy																																				20	1			
Eryſipelas							1												1																	2				
Dyſentery		1	1					1	1	6	1				15	1	2		2												1					33				
Belly-ache		1	2	1	2	1	2		1		1			1			1	1	2		2	1	1		1		5	1	1					1		29				
Obſtructed Viſcera														1	1	1									1											4				
Diarrhœa		2		1	1				1							1			1						1		1									9				
Worms								1																												1				
Indigeſtion				1																					1		1									3				
Pain of Stomach																		1			1		1											1		4				
Vomiting															2										1											3				
Rheumatiſm	1		1	4	8	10	5		1	5	4	2	1		2	4	2	4	1	2	3	3	5	2			1	3	3	2		2	2		1	84				
Gout			1												1																					2	1			
Scurvy		6		2	3	3				8	8	16	3	12	89	5	2	1	5	2	1		1	1	2	1	1	2	1	2							177				
Scrophula								3																												3				
Head-ache		1	1	16		1	1						1		1				5	1		1	3	1	3	3	3	2		2	1				2	52				
Giddineſs		1												1							1															2				
Epilepſy			1	1			2	1	1						4					1				1		1										16				
Apoplexy							1																													1				
Mania					1																															1				
Sore Throat		1		1		11	1					1			2		1	5	5	2	8	4		2	3				1	3		1		6	57				
Cough			3	11	1	9	2	2				2			5	1	2	3	6	13	17	1		1			1									91				
Hæmoptyſis			1																			2						1								4				
Phthiſis			1																		1		1														3	2			
Hæmorrhage				1														1																		2				
Ophthalmia					2		1		2		1	1												3	1		1	2						2		17				
Blindneſs				1	1												1																	1		4				
Ear-ache								1		1							1	1	1			7	1														13				
Deafneſs																	1	2					1														4				
Nephritis			1	1			1				1		1				1		1						1				1	1		1			1		12				
Suppreſſion of Urine																		1		1																2				
Diabetes																	1		1																	2				
Hæmorrhoides			1																					1	2						1			2		7				
Old Age						1																				1										1				
Cancer																									1											1				
Schirrous Teſticle																										1										1				
Eruption			1	1		1	1	1	2	1	4	1			1		3		1	1	2	1	1				3		1	1	1	1	1			30				
Impetigo												1				1														1	2	12	80			1				
Itch				3	14	5					1				1			1			2	2	4	1	1	1		1	3	2	4		2	2		120				
Scald		1	1		5		1	3	1		1			1		1				1	3	1	2	3	2		1	3	1	2						38				
Strain		1	2	2	4	3		3	2	2	2	1	3	1	3	1	1	2	5	1	3	1	2	3	2		1	3	1	2		4	1			62				
Rupture																																								
Contuſion	1	1	1		1	4		1													1															268				
Concuſſion		6	10	15	7	9	6	14	13	4	8	3	6	11	8	9	10	3	11	10	7	8	3	13	5	2	7	3	11	9	10	10	1	14	2	1					
Diſlocation																																				3				
Fracture							1														1															19				
White Swelling		1	2		1	3			2		1			1			1				2		1				1				1					1				
Excoriation																											1		1							12				
Wound								1	1	2					1	1		1	1			2	4		1		3	2			4	6	4	2			91	6			
Inflammation	1	1		5	5	3	20	3	10	1	2		1	3	1	1			1		3	2	4		1											55				
Furuncle		2	2	2	1	4	1		1	1			1	1	2		2	1	3	2	3	6	4	3	1		1				3	1	1	1	1		16				
Abſcefs				2	1			2	2							1										1	2									20				
Fiſtula in ano				1	2				1	3	1		1		1				1		4	1										2				1				
Ulcer																																				89				
Accident				6	3			3	6	3	4	2	2		4	3	2		1	3	6	9	10	2	1	1	2	2	1	2		2	3	2	3	1	6	6			
Monthly Number of Diſeaſes	4	31	62	140	128	108	80	78	98	88	76	56	84	150	73	54	50	51	60	53	113	68	38	62	38	23	46	37	59	54	53	50	53	139	9	2388				
Deaths on board				2				6			3	2	2	1	2			1	1		2		1			1				1			1				26			
Number ſent to Hoſpitals	3	4	1	5	6	12	10	18	3	2	2	4	27	32	11			7	5	8			4	15					30	5	6	4	3	9	3			239		
Sent for Fever	1		1	1	1	4		10	2	2		1		1		1			1	2				1					21	1	4	1		1	1			58		
Died of Fever Caſes ſent to Hoſpitals																																							6	

. Two were ſent to ſick quarters at Woolwich, Sheerneſs and Deal, of whom I had no account.

CHAP. VII.

Remarks *on the* Monthly Review *and* Table.

TO the claſs of fever, the dyſenteric, belly-ache, head-ache, and moſtly all the cough and ſore throat caſes ſhould be added, becauſe they originated *all*, I had nearly ſaid, from the ſame ſource; theſe different appearances only depending on the habits or conſtitutions of the ſubjects infected. In this view the number of fever caſes would have been 1135, of whom 9 died. About 1 in 126; and of theſe we allow the bark to have failed in two caſes only. But ſtating the number of caſes at 869, leſs than one in 96 died.

Of the 56 caſes ſent to hoſpitals for fever, one was ſent in July 1779, before there was any convenience on board for men; 19 were Cartel men, and one meſſed with them, who were ſent as ſoon after they complained as poſſible, to prevent this freſh infection from ſpreading on board; one returned ill of

fever from the hoſpital, and was ſent back next day; and a number in a convaleſcent ſtate were ſent as *weak* patients, becauſe the ſhip was going next day to ſea, but could not be received at the hoſpital until the diſeaſe on their tickets was altered from *weak* to *fever*; beſides ſome bad *hands* who were ſent, that would have been kept on board had they been good men. Subtracting all theſe from the fifty-eight, would leave a very ſmall number.

Of 43 real fever caſes ſent to Haſlar, 3 died, 1 in 14 nearly; to Plymouth only 2 were ſent, none died; to Deal and Woolwich, ſick quarters, 2 were ſent, none died; to Gibraltar 11 were ſent, 3 died; upwards of 1 in 4. Of the whole 58, about 6 died; near 1 in 9.

Reſpecting the pleuritic patients, under which head are comprehended peripneumonic caſes, to have loſt one in nine, in my own opinion, is unſucceſsful practice, if they are conſidered ſimply pleuritis and peripneumonia. But as they were combined with infection and its conſequences, the treatment of them became extremely difficult. The pain though acute, and dyſpnœa tho' very diſtreſſing, with urgent cough, from faintneſs and extreme de-

bility induced by blood-letting, though cautiouſly conducted and repeated, were not to be relieved, and much leſs removed by the lancet; which in fact is the only remedy, I had almoſt ſaid, neceſſary to cure pleuritis and peripneumonia. And though debility indicated a neceſſity to give the bark, the pain, dyſpnœa, and cough forbad it; in ſome caſes they were aggravated by it. Theſe complaints ſeemed, eſpecially the worſt caſes, to have originated from old hurts, or contuſions about the thorax; and when ſuch ſubjects meet with infection, the caſes afford a very unfavourable prognoſtic.

Scurvy has ever been conſidered a very dangerous and fatal diſeaſe to ſeamen, and to all people confined within a narrow ſpace, under the influence of bad air, and bad water, bad diet, and want of exerciſe, including every circumſtance which tends to debilitate. And it will ever be found to attack firſt, fever convaleſcents; men debilitated, from whatever cauſe, the ſlothful and the dirty. But fatal and dangerous as it has been to other practitioners, it is a comfort to me to reflect, that I have always found means to obviate its direful effects, having never loſt a patient of

ſcurvy, and never ſeen but one die of it, though I have been near thirty years in the navy. The reaſon of my having been ſo ſucceſsful in this part of my practice is, that, though fatal in its conſequence, it is more eaſily cured, if attention is paid to the ſick, and if expences are not regarded, than moſt diſeaſes. The treatment of my fever patients, my purchaſing vegetable acid from time to time, or fruit and vegetables, and my attention to the patient's diet and cleanlineſs, were the means upon which my ſucceſs depended. The conſequence of this practice, highly beneficial to the public, has been ruinous to my own circumſtances; as the expence, and a very moderate allowance for myſelf, have always exceeded the pay and perquiſites of the ſhip to which I belonged; and had it not been for an indulgence on board of the R——, which nothing but the terror of a jail, which then ſtared me in the face, would have induced me to ſolicit; and for ſome little prize money in the late war, I ſhould have now been in real indigence.

Why medical practice, eſpecially in fever and ſcurvy, is not more ſucceſsful in his Majeſty's navy, I have made appear very

evidently in a pamphlet entitled "A Political View of the Indigent Eſtabliſhment of the Navy Surgeons," and that it depends entirely on Government to remedy it. On the plan I have practiſed in the navy, ſurgeons may drudge on, until age renders them unſerviceable, without having been able to make any proviſion for old age; and then ſuperannuation and poverty, with fifty or ſixty pounds a year, is all their reward and dependence. This digreſſion I hope will be attended to by Government, to whom it is of infinite conſequence; and if it is, it will be productive of more utility to mankind in general than can eaſily be imagined.

A diſquiſition on ſcurvy would be ſuperfluous, after what Dr. Lind has ſaid on it: but I muſt repeat one obſervation which I have already made on the cauſe of ſcurvy, which is, "That grog will ſometimes produce ſcurvy when drank to exceſs, let the patient's circumſtances and ſituation in other reſpects be ever ſo advantageous." I have ſeen ſeveral inſtances of this amongſt gentlemen; and it effects this by deſtroying the digeſtive powers or tone of the ſtomach, and all manner of

appetite

appetite for food *. From theſe and ſimilar obſervations, I conſider grog as one of the principal cauſes of ſcurvy amongſt ſeamen of the Navy. Where either good beer or good wine is ſerved, ſcurvy ſeldom appears or becomes fatal. But when men have been at ſea long, under the circumſtances we have mentioned, one fit of intemperance will induce ſcurvy. But

The baneful effect of intemperance amongſt a ſhip's company is more evident, in the firſt inſtance, in chirurgical caſes, eſpecially contuſion, ſtrain, fracture, wound, inflammation and ulcer, which often bring on fatal diſeaſes. It is melancholy to reflect, that ſo many healthy men ſhould become invalids, or loſe their lives, merely from drunkenneſs. Few, very few, are wounded or hurt on real ſervice, and rendered invalids, compared with thoſe who are, and loſe their lives, by getting drunk. Caſuiſts may therefore refine on the ſubject of cruelty, in puniſhing ſeamen for drunkenneſs, as they pleaſe; but I am fully ſatisfied that it would be perfect humanity

* It alſo probably occaſions obſtructions of the meſenteric glands and liver.

and benevolence *never* to pardon a ſeaman for getting drunk; but to puniſh every one with particular ſeverity, to deter them from this deſtructive practice, and thereby prevent them from the hurts and wounds which they receive, by falling and fighting; and the fatal conſequences which too often follow, moſt certainly, though ſlowly, if not immediately. Amongſt the firſt may be reckoned phthiſis pulmonalis, or conſumption, ſcurvy, and ruptures, and of the latter, fever with its train of evils. Setting the advantages which would redound to the ſervice from their ſobriety entirely aſide, and it is obvious theſe would be many, it is likewiſe in their ſtupid ſtate of drunkenneſs, that they are guilty of the infernal method of applying oil of vitriol to their ſore ſhins, *as they call them*, to get invalided; which was done in the late war, and oftener than once by ſome wretches. After being diſcharged, they made it their buſineſs, I have been told, to get their ulcers within as narrow a compaſs, and as ſoon as poſſible, to enter again for the large bounties—men not being rejected then for a ſore ſhin; and it was their ſtudy to make their ulcers ſoon worſe, by

getting drunk, that they might be ſent to the hoſpital, where they again committed the ſame ſelf-avenging fraud; and ſome in conſequence of it had their legs cut off—and it may be ſaid, perhaps, *deſervedly*. But this is no ſatisfaction to the ſervice, nor ſociety, for the loſs of a ſubject, who might have been long uſeful, if not valuable, had not a miſtaken lenity prevented his being puniſhed for his firſt drunken fit, and his ulcer from being cured. Should it idly be advanced, that puniſhment will not prevent many of them from getting drunk, and that it is cruel to inflict it for ſuch a fault, I reply, that when puniſhment for ſuch a crime becomes part of the invariable diſcipline of a ſhip, few of the men will be ſo daring as to venture to do it; and the idea of the cruelty of inflicting it vaniſhes, when we reflect on the good that it is to be productive of, ſhould only half the number who do get drunk be prevented therefrom, by rigorouſly inflicting the puniſhment, eſpecially when the ſhip is firſt put in commiſſion.

By inflammation, in the Review and Table, is only meant external affection, where no ſuppuration has yet taken place.

Reſpecting the whole number ſent to hoſpitals, it is much augmented by ſending away bad *hands*, to make room to enter good men. Some expence and inconvenience to Government may ariſe from this; but who would not do it that could, were they commanding ſhips daily on ſervice, and liable to come to action every moment?

CHAP. VIII.

SYMPTOMS *which were not obſerved on Board the* JUNO.

THE firſt day ſome patients complained of heavineſs, and a ſlight lethargic diſpoſition; of hardneſs and ſwelling, with pain of the right groin; of ſoreneſs of the throat from inflammation, and an exudation of pus on the tonſils; accompanied with a fetid ſmell to the patient, a very offenſive breath, and an eruption reſembling meaſles.

3d. An angry eruption about the mouth; the patient, when aſked to ſhew his tongue,

was

was unable to put it out; but with great difficulty, from tremors, took hold of it with one hand to pull it out of his mouth downward. A relapse case.

4th. Hiccough in some cases which terminated favourably; and in one which ended fatally with convulsive catching; difficult expectoration of bloody and extremely viscid phlegm.

6th. Profuse hæmorrhage from the nose.

7th. The last symptom mentioned the third day; costiveness, with yellowness of the tunicæ albugineæ oculorum.

8th. Perpetual dryness of the mouth, and a yellow suffusion over the body and eyes.

9th. Pulling out the tongue as on the 3d. Swallowing what was expectorated by cough; and rattling in the throat.

10th. Pulling out the tongue, as mentioned on the 3d.

13th. Provoking tendency to retch, by putting the fingers of the left hand into the mouth as far as possible, and pulling the tongue, while the patient saw no person, and picking the teeth afterwards.

14th. The eyes appeared yellower sometimes than they did at others; the cuticula

ſeparated and pealed off; paralyſis and an uncommonly large and healthy-like ſtool.

16th. Rigidity of the limbs.

19th. Vomiting watery ſtuff only, though other things were in the ſtomach.

20th. Expectorating extremely viſcid and bloody phlegm.

It is remarkable that, virulent as the infection frequently was, no petechiæ ever appeared on any of the patients. Could this poſſibly be owing to any other cauſe than the bark having been liberally adminiſtered?

CHAP. IX.

CASES *which terminated fatally.*

CASE I.

THO. Wakeland, marine, aged about 25, of a thin habit, and inclined to drink, complained the evening of the 25th of April, 1780, of being ſeized with giddineſs, and alternate chills and heats; laſſitude and debility. Emet. ſtatim, ac ſudorific. h. ſ. dedi,

dedi, and allowed ſage tea with nitre to drink throughout the night.

2. No remiſſion A M, and was coſtive. I ordered the common purging draught, and the bark twice P M.

3. A ſlight remiſſion after perſpiring in the night. Cort. ʒ i. ſecunda quaque hora præſcripſi, ac potionem ad libitum.

4. He complained of dyſpnœa, pain at the præcordia, and cough at times, after a very bad night from raving; the pulſe was quick and ſmall, and the ſkin moderately cool.—Ut heri præſcripſi. P M, ſlight belly-ache.

5. He raved in the night; the tongue was browniſh, very foul, and rather ſhrivelled; the ſkin was cool, and the pulſe ſmaller and quicker than natural; the countenance was much diſeaſed, but he thought himſelf better. Corticem ut ʒtio cepit, et vini pauxillum in potione.

6. The cough and pain about the præcordia were more urgent, and the debility was greater A M. Ut heri præſcripſi, et præcordia tinct. cantharid. illinantur. P M ſal. ſuc. gr. v. atq; corticem ut heri adhibui.

7. A remiſſion after moderate perſpiration. Medicinas ſuas ut heri cepit. P M exacerba-

tion. Sexta hora ſal. ſuccin. gr. ix. atq; corticem deglutiit; epithem. utitur, et clyſma injeci.

8. A remiſſion, but he put out his tongue with much difficulty, as he had done for ſome days paſt, though it was now much cleaner. He had two copious ſtools with the clyſter laſt night; the pulſe and ſkin were in the ſame ſtate as on the 4th day. Præſcripſi corticem, tertia quaque hora, et vinum ut 5to die.

9. He was diſturbed in his ſleep with wandering; in the morning he thought himſelf better, but could not put his tongue out until his mouth was moiſtened, it was ſo dry and rough; the pulſe was much firmer, and the ſkin was now hot and dry. Ut heri præſcripſi, et ſal. ammon. crud. gr. v. atq; cort.—P M a moſt violent exacerbation was brought on, from wine being given him by his meſſmates. He laid hold of his tongue, and pulled it out of the mouth, when he was aſked to ſhew it; the dyſpnœa was extreme, during which the thorax ſeemed to be pulled upwards and downwards with vehemence, as well as the trachæa arteria, which at the ſame time was much projected at every reſpiration; the

countenance was dejected, the ſkin very hot, and quite dry; the pulſe rapid, the face covered with ſweat, and ſpeechleſs at times. Veſicat. præcordiis, ubi epithem. cantharid. utitur, fuit admotum, et tart. emet. gr. ſs. ut viſum, atq; tinct. thebaic. gut. xx. 10ma hora dedi.

10. A degree of rattling in the throat laſt night; he had two looſe ſtools from the tartar emetic; at eight this morning he had a remiſſion, and complained of the bliſter. PM he rambled conſtantly. Cort. ut heri, atq; vinum ut viſum dedi.

11. The pulſe was firmer and more regular; in other reſpects he continued as yeſterday. —Ut heri adhuc præſcripſi. PM a ſevere exacerbation returned, reſpiration was extremely laborious; the abdomen more agitated than the thorax, and there was the ſame appearance about the larynx as on the 9th, the rattling more perceptible, and the lower extremities cold. Tinct. theb. gut. xx. decima hora PM.

12. He breathed with more eaſe, though with diſagreeable noiſe; the countenance was hippocratic. Medic. ut heri cepit. PM uneaſineſs about the abdomen, and the lower ex-

tremities continued cold; the clyſter procured him one copious ſtool. Enem. emollien. injeci; et tart. emet. gr. ſs. dedi.

13. A M he provoked vomiting by putting his ſingers down his throat and pulling out his tongue, when he ſaw no perſon, and he afterwards picked his teeth:—I ſuſpected he had worms. 4 P M the upper extremities became cold, and at eleven he died.

In this caſe, it cannot with juſtice be ſaid that the bark failed; for until the afternoon of the 9th, when too much wine was imprudently given him, there was every appearance that he would do well. I therefore thought, and ſaid at the time, that he was as much killed by the wine, as if he had been ſhot; and I am ſtill of that opinion. Another patient got wine from his meſſmates at the ſame time, and narrowly eſcaped with his life.

CASE II.

Iſaac Kidd, ſeaman, aged about 58, of a bad conſtitution, complained on the 17th of May, 1780, of the general ſymptoms of fever, (as I was told, for I did not ſee him) and took an emetic, and the purging draught.

2. He was exceeedingly dejected when I ſaw him, and complained of great debility and laſſitude. Cort. ℥ i. quater in die, et anodyn. h. ſ. præſcripſi.

3. He complained as before; cort. tertia quaque hora cepit.

4. I was told there was no alteration about him. Cort. ut heri fuit præſcripta. P M he became worſe, I was informed.

5. He was thought to be much the ſame. Medicin. ut heri cepit. He walked about in the afternoon, and about midnight (I learned afterwards) he became ſpeechleſs and very reſtleſs. Nothing more was done for him.

6. He died at three in the morning.

Bad weather prevented me from ſeeing this man more than twice; and that was on the mornings of the 2d and 3d days.

CASE III.

Edward Norman, ſeaman, was ſeized in the afternoon of the 27th of May, 1780, with the uſual ſymptoms of fever. I ordered the emetic and purging draught together, and the ſudorific at bed-time.

2. There was a remiſſion of the ſymptoms. Cort. quater in die fuit præſcripta.

3. An exacerbation, I was told, came on laſt evening, and went off in the night. Cortex fuit ter in die præſcripta. P M an exacerbation returned with rambling.

4. He paſſed the night ill from inquietude, rambling, head-ache, pain about the thorax, and difficult reſpiration. A M a remiſſion; at 6 P M the remiſſion continued.—His noſe bled a few drops. Cort. ſecunda quaq; hora dedi. 8 A M veſicat. inter ſcap. admov.

5. I was informed that about eight laſt night the exacerbation returned with great dyſpnœa, and rambling, and that he died about five in the morning.

I only ſaw this man on the 4th day of his illneſs. The ſhip was at Spithead, and bumboat women brought liquor and ſtrong beer on board, which their meſſmates, eſpecially when drunk, always give to the ſick;—and as the two laſt caſes almoſt certainly fell under this predicament, I think the bark had not fair play in either of them, more eſpecially as the experiment was not made under my own obſervation.

CASE IV.

James Gray, of a very eaſy temper, and lax fibre, being ſubject to hæmorrhage from the noſe, complained on the 29th of May, 1780, of the uſual ſymptoms of fever, I was told. Emet. et ſudorif. cepit.

2. A perfect remiſſion; the vomit purged him. Corticem bis in die præſcripſi.

3. He continued to recover. Cort. ter hodie fuit præſcripta.

4. His ſtrength returned ſlowly. Cort. quater dedi.

5. He relapſed. Corticem ſecunda quaque hora, et veſicat. inter ſcapulas præſcripſi.

6. He complained much of inquietude, heat, and thirſt. Cort. ut heri cepit. P M a violent hæmorrhage from the left noſtril reduced him to extreme weakneſs; calling upon him accidentally, I found about a pound of blood in the bucket. Cort. ʒi. alum. com. gr. x. aq. ſimp. ʒij. fiat hauſt. ſingulis horis repetend.—et vin. cochlear. i. ut viſum ſumat. The ſecond doſe of the medicine entirely ſtopped the hæmorrhage; dein. alum. fuit omiſſum. Anod. h. ſ. cepit.

7. Debility and faintneſs with cough at times. Ut heri, ſine alumine, præſcripſi. P M a little hæmorrhage. Alumen ut heri cepit; ac vini cochleare ut viſum.

8. Great thirſt, with a dry brown tongue, diſtreſſed him; a bloody ſerum oozed from the noſtril. Corticem et vinum ut heri dedi.

9. Extreme debility, catchings, or convulſive twitchings, an unnatural reſpiration, urgent cough, ſwallowing what he expectorated; and ſordes about the mouth. Medicin. ut heri, ſal. ſuccin. et ammoniac. gr. iv. ſecunda quaque hora cepit.

10. About midnight a violent exacerbation came on, with dyſpnœa and oppreſſion about the præcordia. Medicin. ut heri, et veſicat. ſcrobic. cordis admovi. P M raving, inquietude, and the cough were diſtreſſing; when he was aſked to put out his tongue, he pulled it out of the mouth, downwards; he was alſo coſtive. Enema injeci.

11. He had a ſtool from the clyſter, and the tongue was clean, though the teeth were covered with ſordes; he raved at times through the night, and was deſirous to get out of bed, complaining only of weakneſs;

there was a convulsive motion of the lower lip, and the voice was altered. Ut heri; et P M rad. serp. virg. decoct. dedi, atque cortic. omisso vino.

12. He was worse; the pulse was quick and weaker, and his eyes were generally shut. Medicinas adhuc cepit. P M sal. succin. gr. x. quarta quaq; hora; aliter ut nona vinum præscripsi, et enema fuit repetitum.

13. Tremors increased, he became speechless at times, and coughed rather less. Cort. ʒi. sal. ammon. cr. gr. viii. secunda quaque hora, atq; vin. pauxillum ut visum præscripsi; vesic. femoribus internis admovi.

14. His appearance and symptoms varied.—A M the countenance was more lively, but the tremors, or rather universal paralysis, with raving and inquietude, continued. Ut heri, atque rad. serp. virg. decoct. P M the paralysis abated: a subsultus tendinum was observed through the day; and he voided an uncommonly large and healthy-like stool.

15. He had an exacerbation of heat, and inquietude the first part of the night, accompanied with a quick, full pulse, and towards morning a remission. At noon the paralysis returned, the countenance more diseased, and

he ſweated about an hour. P M the paralyſis remitted: 6 A M tart. emet. gr. ſs. atq; decima hora am. iterum, medicinas ut heri cepit.

16. He paſſed the night ill from inquietude, paralyſis, and other ſymptoms of death. Ut heri decima hora præſcripſi. P M rigidity and continual motion of the limbs, with ſweat, chiefly on the forehead.

17. About midnight a profuſe ſweat broke out, for a ſhort time; but he continued perſpiring for ſeveral hours. A M the countenance tending to the hippocratic, and there was a conſtant motion of the mouth as if he had been taſting ſomething; the paralyſis was elſewhere ſcarcely perceptible; the ſkin was moderately cool and ſoft, and the pulſe was firmer and more regular than for many days paſt.——P M extremely weak, and the tongue very ſore, though he continued better. Medicinas quarta quaque hora, et vin. pauxillum ut viſum cepit.

18. About 8 laſt night frequent catchings, ſtartings, and ſubſultus tendinum came on; the face covered with profuſe ſweat, the pulſe very weak and irregular, and twice he ſhewed a diſpoſition to get out of bed, by putting

ting his legs and arms out; at other times he lay on his back, with his eyes generally ſhut. His ſkin moiſt and ſoft. AM the countenance better, and eyes ſhut. PM he was diſtreſſed with teazing cough, and was coſtive. Medicinas quas 15to die 10ma hora am. præſcripſi, nunc quarta quaque hora cepit, et diætam maxime idoneam. PM enema emolliens fuit injectum.

19. Between twelve at night and four in the morning he lay quiet; before and afterwards, he was, from inquietude, with difficulty kept in bed, and at 8 AM he died. Query—Did not this man's death proceed from the hæmorrhage on the 6th? I have not a doubt of it, and therefore deny that the bark had a fair trial; had information been given when it firſt began, it is more than probable that his life would have been ſaved.

CASE V.

George Hogg, the ſhip's barber, much addicted to tippling, after drooping a month, principally with cough and various pains, complained on the evening of the 7th of June, 1780, of the general ſymptoms of fever, and cough. Emetic. et ſudorific. dedi.

2. He perceived no alteration; the ſymptoms were not violent.—Sal. cath. amar. ʒi. ſumat, et P M corticem Peruv.

3. He complained of thirſt and univerſal ſoreneſs.—Cort. quater in die ſumat.

4. Debility, cough, and pain about the thorax, attended with anxiety, haraſſed him; the ſkin and pulſe hitherto were very little hotter or quicker than natural. Cort. quater atque tart. emet. gr$\frac{1}{3}$. cepit.

5. A remiſſion. Ut ʒtia præſcripſi.

6. He continued better after a tolerable night's reſt. Corticem ut heri dedi.

7. He was diſturbed in the night with frightful dreams; the countenance always fluſhed; the pulſe quick, and the ſkin hotter than natural, and the tongue had a boiled-like or macerated appearance. Cort. ſecunda quaq; hora præſcripſi.

8. An exacerbation, after paſſing the night ill from inquietude, but he complained chiefly of perpetual dryneſs of his mouth.—Ut heri medicinam adhibui.

9. He complained more of thirſt. Cort. atque rad. ſerp. virg. decoctum ut heri deglutivit.

10. He reſted ill from inquietude and wandering dreams; the cheeks more fluſhed; he ſeemed very anxious, but complained of debility only. Ut heri præſcripſi.

11. After a tolerable night there was no alteration, only that he did not take his medicine:—he was coſtive. Sal. cath. am. ʒſs. atque cort. ut heri ſumpſit.

12. He was reſtleſs about midnight, at other times dozed inſenſibly; debility was his only complaint; and that he had no appetite ſince he was taken ill. Ut heri, ſine ſal. cath.

13. A remiſſion ſucceeded a profuſe ſweat, A M; there was an exacerbation P M. Corticem adhuc cepit, et vini paux. ut viſum.

14. He perſpired twice in the night, and ſtarted once out of his ſleep in a fright. A remiſſion in the morning.—Ut heri præſcripſi.

15. He had a tolerably good night, was generally in a moderate ſtate of perſpiration, and ſenſibly ſtronger. Corticem quarta quaque hora atq; ſal. ammon. cr. gr. v. dedi:—aliter ut heri præſcripſi.

16. An exacerbation with fluſhed countenance, the pomegranate appearance of the

tongue, and deſpondency returned, which he had all along I learned. He had no ſtool yeſterday.—Ut nono, atque vinum ut viſum præſcripſi. Enema com. fuit inject. et veſicat. inter ſcapulas admotum. PM a ſlight remiſſion; the bliſter pained him, but in the evening an exacerbation returned.

17. He ſlept, and perſpired moderately in the night, which brought remiſſion.—Ut heri, unaquaque hora medicinas dedi, atque vinum. PM he complained of pain about the left ilium, which was accompanied with profuſe diarrhœa, that haraſſed and weakened him exceedingly. Tremors on him at times. Anodyn. ut viſum dedi.

18. No heat or quickneſs of the pulſe; on the contrary, the ſkin was moiſt, and the tremors leſs perceptible after a good night.—He wandered a little at times, and was ſo weak that he could not put his tongue out.—Medic. ut heri, hodie; atq; vinum et opium ut viſum, præſcripſi. PM an exacerbation of the tremors. Hiccough at times, he again complained of the pain of the ilium, and the tongue was enlarged.

19. He reſted tolerably, and the diarrhœa, which had the bark appearance, was abated; but

but tremors, hiccough, and ſubſultus tendinum were diſtreſſing. I omitted his medicines, and allowed him milk which he craved, and wine frequently. He retched at times from cough (for it continued all along, more or leſs), and brought up clear watery ſtuff. An ounce of portable ſoup diſſolved in ten ounces of water, with half an ounce of bark and one grain of opium, were given as a clyſter at ten in the morning and ſix in the afternoon. P M the pulſe tremulous at times, but he thought himſelf better.

20. The hiccough frequently haraſſed him greatly; ſubinde ol. cinnam. gut. i. cum ſacch. alb. fruſtulo cepit; he ſpat up ſometimes a bloody and extremely viſcid phlegm through the night, and had a ſtool; he became ſtronger, the pulſe was firmer, and he put his tongue out. Ut heri præſcripſi.—P M the hiccough, ſubſultus tendinum, cough, and retching at times became more fatiguing, the ſtrength failed, and the pulſe fluttered.

21. The complaints continued through the night; he never brought the milk up when he retched. Ut heri præſcripſi; ſed primo enema emolliens (aq. ſimp. ℥x. ſacchar. iv. axung. ℥ij. fiat enema) injiciendum. In the fore-

noon his face was covered with a greaſy ſhining moiſture, and the countenance became hippocratic. Univerſal paralyſis, and at two P M he died. This is the only caſe wherein I allow the bark failed.

CASE VI.

John Blair was ſeized the 27th of June, 1780; he complained of the general ſymptoms of fever, of which he was ſo much relieved by a vomit and ſudorific, that he thought himſelf well, and went to his duty.

On the evening of the 2d of July, he complained again of head-ache, great pain about the præcordia, extrême depreſſion, with a very diſeaſed countenance, and total proſtration of ſtrength; he informed me that he had been ſeized the preceding evening with ſhivering, ſevere head-ache *, and the uſual ſymptoms of fever. Statim ut 27mo ult. deinde corticem ſecunda quaque hora per noctem præſcripſi.

2. I found hardly any alteration.—Corti-

* I predicted the patient's death as ſoon as I ſaw him.

cem

cem adhuc cepit, atque opium ut viſum. P M he had a very ſlight remiſſion.

3. He was diſtreſſed with diarrhœa, griping, extreme giddineſs, debility, and the countenance ſeemed bloated; the pulſe was very moderate, and the ſkin cool. At 4 P M an exacerbation came on:—corticem et opium ut heri, atq; vin. ut viſum præſcripſi.

4. A remiſſion of all the complaints excepting the giddineſs and proſtration of ſtrength and ſpirits; he coughed at times, which brought on pain about the præcordia, and the tongue was brown and rough. P M an exacerbation with convulſive catching, hiccough, and dejected countenance. Medicinas, ſine opio, ut heri, atque vinum libere dedi; et veſicat. præcordiis admovi.

5. Scarce any alteration, the pulſe very weak and low. P M the pulſe altered often in the courſe of the day; inordinate craving for water to drink, and to go aſhore, though he ſeldom ſpoke; the ſkin was hot at one time, and the tunicæ albugineæ were yellowiſh. Ut heri; ac tinct. cort. Huxham. ℥ ſs. præſcripſi; it did not agree with him:—10 P M. ſal. ſuccin. gr. ix. cepit.

6. He was comatoſe, and ſeldom ſpoke,

and though more and more exhauſted, thought himſelf better; the pulſe ſeemed firmer and more regular. P M involuntary diſcharges of urine and fæces: the diſcharge from the bliſter was a dark-coloured ſanies, and the bliſtered part had the ſame appearance; he pulled, and looked at the bed-clothes; and was very reſtleſs. Medicin. ut heri, et ſal. ſuccin. gr. xii. 10ma. hor. P M cepit.

7. He died at 8 A M. And

His meſſmate informed me that he was never well after the firſt attack on the 27th of June; then a ſevere head-ache was his chief complaint. He alſo told me that he had ſeveral venereal ſymptoms about him.

In this caſe the proper time, between the 27th June and 2d July, to have given the bark was loſt, by his obſtinately returning to duty. I therefore deny that the bark had a fair trial.

CASE VII.

James Clark, aged about 25, had been very ill of fever from the 23d of March laſt to the 5th of May, when he recovered with much difficulty; and from lurking about the ſick

berth, drooped ſix days before he complained the 28th July 1780 P M of alternate chills and heats, head-ache, lumbago, and proſtration of ſtrength and ſpirits. Emetic. ſudorific. et pediluvium præſcripſi.

2. He had two ſtools, and perſpired laſt night, but the chilline ſs and lumbago continued. Corticem ſecunda quaq hora; et veſicator. P M inter ſcap. admov. præſcripſi.

3. He perſpired ſince yeſterday A M, and reſted tolerably laſt night; which brought a remiſſion of the fever and lumbago; but the head-ache was more troubleſome. No alteration P M. Corticem ut heri; et anodyn. h. ſ. cepit.

4. A ſleep A M; and a perfect remiſſion P M. Cort. ʒj. vin. quater ſumat.

5. Though his medicine was not regularly adminiſtered yeſterday, he continued better. Ut heri præſcripſi.

6. He was got up very early to clear the ſhip, which brought on exacerbation. Ut 4to die.

7. A remiſſion after a good night. Cort. ʒj. vin. ter cepit.

8, 9. Continued to recover, but was dejected. Ut heri.

10. Exacerbation particularly of head-ache, lumbago, and pain about the breaſt. Cort. ut 4to præſcripſi, et veſicator. ut ſupra. P M no alteration.

11. Remiſſion A M, and exacerbation with unuſual pains P M. Ut heri, et anod. adhuc h. ſ. cepit.

12. No remiſſion, and expectorated a dark-coloured pus. Ut heri.

13. Remiſſion A M and exacerbation PM as uſual. Ut heri. No expectoration.

14. Exacerbation of head-ache and lumbago with extreme debility. Ut heri.

15. Great debility and depreſſion A M, the pulſe firmer P M. Cort. 6ties. ʒj. op. et vin. ℥ viij.

16. He ſweated profuſely the firſt part of the night, paſſed the middle part very ill from inquietude; and became ſpeechleſs A M. Ut heri, et veſicator. femor. intern. admov.

17. He paſſed the night ill from inquietude and raving; and died P M.

This is the other wherein I allow the bark failed; though his being got up ſo early the ſixth did him hurt.

CASE VIII.

John Goldingay, marine, aged about 27, of a ſtrong make, but had been not many months before very ill in the Weſt Indies, complained the 16th Sept. 1780 PM of having been ſeized the morning of the 15th with chilline ſs and univerſal pains, particularly of lumbago; and now he knew not what to complain of moſt. His ſpirits and ſtrength were exhauſted, and the countenance extremely diſeaſed, being bloated and ſallow, with blackneſs round the eyes, which were lifeleſs. The moment I ſaw him, I predicted the fatal event. Emetic. ſtatim, et horis duabus elapſis, cort. ℥ij. ſecunda quaq; hora repet. præſcripſi; et veſicatorium inter ſcapul. admovendum; et pediluvio utitur.

2. The pulſe, which fluttered laſt night, is more diſtinct and firm; and he vomited with the emetic, and had ſome ſtools in the night, but did not find himſelf relieved. Cort. ℥ij. cum opii grano, ut viſum, et ſerp. virg. decocti ſortis ℥iſs. unaquaq; hora præſcripſi. PM he had ſeveral ſtools in the day, and his tongue was enlarged and white.

3. He paſſed the night ill from inquietude and univerſal pains, eſpecially about the ribs; and the diarrhœa continued. But the pulſe was firmer and more diſtinct; the ſkin was ſoft, moiſt, and moderately cool; and his ſpirits were revived. Medicinas ut heri ſecunda quaq; hora præſcripſi. At noon, he complained of ſuppreſſion of urine, probably from the bliſter, and the abdomen ſwelled. Spirit of nitre dulc. was added to his drink, and a bliſter applied to his left ſide; the diſcharge from the bliſter, a dark ſanies. P M voided his urine, and complained of the bliſter on his ſide.

4. He was diſturbed from coughing; but the diarrhœa abated; the ſkin was ſoft and moiſt; the tongue was clean, though ſtill enlarged; and his ſpirits were good. However, the mouth was inceſſantly dry, and his countenance as before. The diſcharge from the bliſter was now yellow and viſcid, like ſtrong jelly. Medicinas ut heri cepit.

5. About midnight an exacerbation with great anxiety, deſpondency, dyſpnœa, oppreſſion at the ſcrobiculus cordis, and inquietude; with a quick irregular pulſe. Ut heri, cum ſal. ſuccin. gr. x. 6ta quaq; hora. Veſicator. later.

altero admov. & 4ta hor. P M. Theriac. Androm. gr. ſs. cum ſal. ſuccin. gr. x. præſcripſi.

The extremities became cold P M; he wandered a little, and died at 8 o'clock.

Had he complained the firſt day of his illneſs, I think, the bark would have ſucceeded.

CASE IX.

Wm. Ruſſel, aged about 20, drooped, and was ſeized with general ſymptoms of fever a week before he complained on the 11th Nov. 1780 P M. Emetic. et ſudorific. præſcripſi.

2. Sweated profuſely through the night, and was relieved; but his countenance is ſallow, and a little bloated. Sal. cath. ʒſs. mane, et cort. quater in die capiat.

3. A remiſſion after ſweating profuſely all night. Cort. quater cum tart. emet. gr. $\frac{1}{4}$. ut viſum.

4. Complained only of giddineſs and debility, though his countenance was much diſeaſed. Ut heri.

5. No alteration after a reſtleſs night. Cort. tertia quaq; hora cepit.

6. Dyſenteric ſymptoms, and continued to perſpire. Had very little fever, but the tongue was diſeaſed. Cort. cum op. præſcripſi.

7. Vomited his medicine at times, and ſeemed much diſeaſed, though he had a tolerable night. Ut heri præſcripſi.

8. Remiſſion and perſpiration on him after a pretty good night. P M exacerbation. Cort. quater cepit.

9. Remiſſion at midnight, and perſpiration on him A M. Exacerbation P M. Cort. quater cum elix. vitriol. & vin. ut viſum præſcripſi.

10. Remiſſion. P M exacerbation returned ſlightly. Ut heri.

11. He either fell, or got out of his hammacoe, and tumbled down into the lee ſcuppers, where he was found quite wet and almoſt dead with cold, through negligence of the ſentinels. A M exacerbation with flufhed countenance, and tongue much diſeaſed. Hauſt. cardiac. primo, dein cort. cum vin. præſcripſi.

12. Great thirſt; the tongue enlarged, brown and dry, and unable to put it out; and oppreſſion about the ſcrobiculus cordis. Tart. emet. gr. ſs. cum cort. ſecunda quaq; hora.

PM he complained of internal heat and thirſt.

13. Great thirſt, with anxiety and inquietude through the night, though he perſpired. Very feeble AM, his tongue was decreaſed, clean and ſoft during the remiſſion until 10 forenoon. Cardiac. cum cort. & vin. & veſicator. femor. intern. admov. præſcripſi—a violent exacerbation having come on. He was ſpeechleſs for a ſhort time, and his face was affected with convulſive twitches and covered with cold ſweat; the countenance ſeemed bloated; the eyes were lifeleſs, and the pulſe was ſlow and weak. About noon, a ſlight hæmorrhage from the right noſtril.

14. Diarrhœa, the pulſe quicker, and ſtonger, and the ſkin preternatually hot and moiſt. Complained often of pain in his feet. Ut heri medicinas cepit. PM the hæmorrhage returned.

15. AM a ſleep, but no ſign of recovery. The pulſe irregular, quick and ſmall; the countenance very diſeaſed and ſqualid; and the colliquative diarrhœa continued. PM hæmorrhage. Ut heri præſcripſi; et aluminis gr. x. bis in die ſumenda.

16. No favorable appearance, tremors and other ſymptoms of diſſolution increaſe. Medicinas, ſine alumine, ut heri cepit.

17. Delirium and great inquietude A M after a reſtleſs night. Involuntary effuſion of tears at the external canthi, with pain of his ſide. Laudable diſcharge from the bliſters. Ut heri præſcripſi. P M exacerbation. Tart. emet. gr. $\frac{1}{6}$ cepit.

18. Remiſſion A M. Exacerbation P M of tremors. Medicinas ut heri capiat.

19. Symptoms of death through the night. Ut heri cum rad. ſerp. virg. decoctet. P M he drank a pint of the ſhip's beer at once, which he craved much.

20. No favourable ſymptom. Medicinas & vinum ut ſupra capit.

21. He died about noon.

The accident which happened to him the night of the 10th, was certainly the cauſe of his death.

CHAP. X.

Of the Management of the SHIP FEVER.

SECTION I.

Of Blood-letting.

WE took notice that the climate, and other circumſtances under which we practiſed, eſpecially on board the Juno, induced us to think it proper to let blood in a number of caſes, eſpecially when the patients firſt complained; but further experience, and a careful review of the Diary, convinced me, that it never was productive of good, but, on the contrary, of miſchief: and having never ſince found in a much more extenſive practice, that one patient has ſuffered by omitting that evacuation (for I have never let blood of a patient for ſhip fever on board of the Edgar), I can aſſert, that in a hundred caſes it

will not be neceſſary to let blood. It is poſſible a caſe may occur, wherein it may be proper; but we have not met with ſuch a one among ſeveral hundreds, unleſs the patient was previouſly hurt about the thorax, which alters the caſe; we therefore caution young practitioners againſt blood-letting.

A friend of mine, who was ſurgeon of a ſeventy-four gun ſhip, in 1780, in a converſation on this ſubject, told me, that it was his practice to let blood of his patients, and that it ſeemed to relieve greatly; eſpecially when they had fixed pains about the thorax. I adviſed him to omit bleeding ſome of his patients in future, and to treat them with bark; and to obſerve whether they did not recover ſooner than thoſe from whom he took away blood, and treated in other reſpects as his other patients. The next time we met, he told me that he had followed my advice, and found that the patients whom he bled became much weaker, and were recovered with greater difficulty than thoſe who were not bled. This is a pointed teſtimony of an unwilling evidence againſt a favourite evacuation of his own, and of many others.

SECTION II.

Of Emetics.

WE already mentioned, that, if emetics are adminiſtered when the firſt ſymptoms of contagion are perceived; or during the cold or ſhivering fit of the firſt paroxyſm, they frequently become a preventive of the fever, as Dr. Lind has likewiſe obſerved: but otherwiſe, we have rarely found them of further benefit, than to unload the ſtomach; and however early in the diſeaſe the patient took it, I preſcribed a ſudorific at bed-time, and the pediluvium generally. Indeed the emetic frequently procures ſeveral ſtools and perſpiration; but this ſeldom is critical, unleſs at the commencement of the fever.

After what is ſaid, we judge it unneceſſary to enjoin young practitioners to vomit their patients as ſoon after they complain as poſſible; and if this happened in the evening, immediately after to give a gentle ſudorific, expoſing the patient as little as poſſible to cold, that the perſpiration, if they have dependance upon it, may be kept up as long as they judge

proper. But ſhould the patient have been ill ſeveral days before he complained, it will be, generally ſpeaking, a loſs of time to promote ſweating, and idle to expect relief either from vomits or ſudorifics.

The emetics which I preſcribe are either the pulv. rad. ipecacuan. or tart. emet. in the manner I have already mentioned. But I would earneſtly recommend adminiſtering the tartar emetic in ſmall doſes, every half hour, until it operates; leſt otherwiſe the patients receive much hurt inſtead of good, by giving full doſes of it. Great is the miſchief which has been occaſioned by giving from three to ſix grains, or what is called a full doſe at once, —univerſal ſpaſms, and extreme debility, which have proved the means of death.

If the emetic is given before noon, the remainder of the day muſt not be loſt. Unleſs the patient has had a copious ſtool or two, I order a gentle cathartic to be given two hours after the vomiting is finiſhed: the cathartic which I generally order is the ſal cathart. amar. ʒi. with, or without, cremor. tart. ʒij. —To ſave time, in many bad caſes, I have given the tart. emet. and ſal cath. am. together, in ſmall quantities, repeating them until a ſtool was procured; and then ordered the bark.

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SECTION III.

Of Sudorifics.

AT bed-time I would adviſe a ſudorific to be adminiſtered, and the limbs to be waſhed with warm water, and a little vinegar. Sudorifics are very numerous; but what I have preſcribed on board of the Edgar, is either of the two following—Tart. emet. gr. ſs. vel gr. I. opij gr. ſs. conſ. roſ. fiat bolus—Vel ſal. C. C. gr. v. opij gr. ſs. con. roſ. fiat bolus; hora ſomni ſumendus; ſuperbibend. potione diluente, tepida, ad libitum—but ſudorifics not to be repeated.

SECTION IV.

Of Bliſters.

SHOULD the patient have been ailing ſome days before he complained, and the head-ache violent, it will be the more neceſſary to apply a bliſter between the ſhoulders at this time.—If it was evening before the patient com-

plained, I generally thought fit to give the emetic and ſudorific, and to bathe the limbs. But in many caſes I applied the bliſter immediately.

I have remarked in the Obſervations, that unleſs bliſters are applied very early in Ship Fever, I could hardly ſay they ever proved beneficial, except in caſes with fixed pains about the thorax, which they often removed without abating the fever. I am ſo well confirmed in the juſtneſs of the remark by longer experience, that I would ſtrongly inculcate the application of bliſters early, without regarding any theory on the action of cantharides and bliſtering in the beginning of fever —if they wiſh to apply them with good effect. I therefore repeat it, with Dr. Lind, that when applied early, they often carry off the fever entirely: but I muſt add, though contrary to that eminent phyſician's opinion, that I never perceived good effects from them, or the diſcharge which they procured, in the advanced ſtate of fever, except in the caſes before mentioned.

SECTION V.

Of Cathartics.

THE next, or ſecond day of the patient's complaining, I ordered him the cathartic, unleſs the emetic had procured ſome ſtools; and unleſs bark was preſcribed together with the cathartic, which was often done, I began to give it as ſoon as the patient had one or two looſe ſtools, and afterwards it was continued from every one to every four hours, as I ſaw occaſion. The ſudorific was, often, again repeated at bed-time, and the bliſter applied as already mentioned, when the head-ache was violent.

SECTION VI.

Of Bark.

IN ſome caſes, I preſcribed it as ſoon as the patient complained, without waiting for any evacuation whatever;—in others, a few hours after they were vomited only; and often along with the cathartic, according to the exigency of the caſes. The more dangerous and alarming theſe are, the more neceſſary it is—experience has convinced me—

to adminiſter bark early. But as our chief dependence for the cure was on bark, though other medicines were frequently joined with it, we ſhall be more particular on this head; and at the ſame time endeavour to combat the principal objections which theoriſts advance, againſt the early uſe of bark in fever, which they found on the tonic, phlogiſtic and conſtipating qualities of the bark*. I wiſh however to know of phyſicians, whether, in a regular ſeries of fever practice, they have diſcovered thoſe qualities by its effects when early and liberally adminiſtered in fever; or if it is only a preconceived prejudice grounded on their own theory, or the theory of a favourite author or practitioner, which preſents this unfavourable idea of bark. And finding it to poſſeſs thoſe qualities, I beg to be informed for what reaſons they preſcribe it for intermittents, as it is univerſally admitted, that the ſyſtem labouring under an intermittent, is nearer to a ſtate of health than it is

* In the former edition was added, "Which, if I miſtake not, may be expreſſed in the word mechanical;" by which I meant, that as they never affixed definitions to theſe terms, but have uſed them vaguely and indefinitely—mechanical would have been equally proper.

under any other genus or ſpecies of fever*? Becauſe, if their own idea of bark is juſt, and the general opinion of intermittents be true, it is a plain philoſophical induction, that ſo powerful a tonic and phlogiſtic medicine is of all others the moſt improper to be adminiſtered in this ſtate of the ſyſtem. When it is adminiſtered, as I have often given it, to people in perfect health, to prevent fever, what become of its tonic and phlogiſtic qualities? They continue to enjoy their health amidſt infection. Hence it is obvious, they muſt either change their opinion, and find out new objections againſt it, or candidly acknowledge that it is the reaſons before mentioned which have prejudiced them againſt it; prejudice which has been the bane of thouſands; prejudice which has prevented us ſo long from getting one ſtep beyond the line marked by our anceſtors. Shall every ſcience daily receive improvements, but that which is the moſt eſſential to man? Seeing theſe improvements in other ſciences, and looking with amazement and ſympathy on the ſuperſtition and errors of our fellow creatures in ſome of them, and having reſolution and wiſdom to

* I ſpeak in compliance with the cuſtom only.

think for ourſelves, what can induce us to idolize them in the practice of phyſic only, wherein they have been ſo extremely deficient? Are we for ever to continue ſacrificing the lives of our fellow creatures to their falſe doctrines, erroneous principles, and unjuſt prejudices? Let us regard inſtruction, originate whence it may; inſtruction dearly bought by the perſon who offers it with great diffidence to his fellow citizens; inſtruction, the fruit of a long and extenſive practice, collected from innumerable inſtances of its ſalutary effects, and ſurely not to be rejected, becauſe it militates againſt falſe old theories new modelled.

Of the *real* manner in which bark operates ſo ſpeedily and powerfully, we are, and perhaps ever will be ignorant. But the effect of bark in fever is obviouſly reſtorative. Where one patient has died from an early and liberal uſe of bark in fever, certain I am that thouſands have died from a contrary practice. The danger which theoriſts threaten us with, from an early and liberal uſe of bark in fever, ſtrikes me with the ſame idea as if they told me, I ſhould poſſibly fall, if they ſaw me running out

of a magazine of powder, which I knew was immediately to blow up by a train leading to it being lighted.

Let us view this important ſubject in another light; and for this purpoſe you may ſtill retain the former idea of bark, but think proper to honor me with a conſultation on the following caſe: "The patient, you inform me, has undergone the common evacuations, and has been bliſtered, but is not relieved; and that though the ſymptoms are not violent, you apprehend danger, as ſimilar caſes under your care have ended fatally." I am ſorry you did not confer this honor ſooner; but pray what are your patient's ſymptoms? "Various pains, eſpecially head-ache; thirſt and anxiety; the ſkin is dry and hot; the tongue dry and parched; pain about the thorax, eſpecially during the exacerbation, which happens P M; and the pulſe quicker and fuller than natural; and that he has been nearly in the ſame ſtate for ſeveral days, only that he becomes weaker, though you ſtrictly adhered to the antimonial and camphire treatment, and have given ſaline mixtures, and ſubacid and diluting drink to promote diaphoreſis, and moderate the fever." I admit that by this

method you may bring on perſpiration, and a temporary relief; but you will as certainly haſten debility, and a train of far more dreadful ſymptoms than thoſe you intend to relieve. Therefore, to mitigate the preſent, and to obviate the future, I preſcribe bark liberally in any form that will agree beſt with the patient, joining occaſionally any other medicine with it I think proper; taking care to avoid naufeating doſes of antimonials, and allowing the patient to drink moderately of wine and water, with toaſt and water, and a little vegetable acid in it, if greatly deſired. Should the bark diſagree with him, either give a full doſe of L. L. or add wine, or tinct. cort. with it, repeating them, or leaving them off, as you ſee proper. If it purges, join opium; and, if coſtive, add occaſionally a few grains of rhubarb to it, or any mild purgative, or give a clyſter once in twenty-four hours. Upon the ſuppoſition of its becoming neceſſary to promote perſpiration, either give ſmall doſes of volatiles, camphire, and ſal. ſuccin. or antimonials in very ſmall proportions during the exacerbation, repeating them, opiates being joined to either of them, as you ſee fit: But, I ſay, carefully

avoid profuſe perſpiration. When your patient arrives at a convaleſcent ſtate, though he ſtill has exacerbations towards night, allow him more wine, be attentive to his diet, and give him an anodyne every night, at leaſt, until he recovers.

When we meet, you inform me, "That our patient is recovered; though you muſt acknowledge, that he has been treated very differently to the general practice; that you have ſtill your doubts concerning the propriety of it; and aſk me, if I would preſcribe it in every ſpecies of fever?" I know not how many ſpecies you reckon of fever; but I would preſcribe it, I anſwer, in every caſe not ariſing from actual inflammation, or topical affection—even in meaſles or ſmall-pox, if they unfortunately appeared where ſhip infection was. In both I have done it ſucceſsfully; tho' I never had an opportunity to try it in the ſmall-pox while the ſhip infection raged. To preſcribe bark in that ſtate of ſmall-pox, called ſecondary fever, you ſay "is common—but, ſtill prepoſſeſſed with the idea of the tonic and phlogiſtic qualities of bark, you judge it improper in the beginning of ſhip fever, *or any fever*."

To conclude, I tell you that, the ſooner it is given, the more effectual it will be, and the leſs will anſwer the purpoſe;—that this is aſſerted not from opinion, nor the authority of any other perſon, but is the dearly purchaſed fruit of experience, very often at the riſk of my own life—experimental truth, which it is not probable I will ſacrifice to theoretic errors, how venerable ſoever their names who gave them birth, or now ſupport them.

I have likewiſe added from ten to fifteen grains of pulv. cort. eleuther. to every doſe of the bark; or a decoction of rad. ſerp. virg. ʒ ij. to two ounces of bark. But when, and in what proportion, other medicines are to be joined with it, the patient's ſituation, and the judgment of the practitioner, muſt regulate. He muſt not, however, reſt ſatisfied, nor imagine that he has done his duty, eſpecially on board ſhip, becauſe he has preſcribed, be it ever ſo judiciouſly. He muſt be certain, that medicines, as well as drink and food, in a convaleſcent ſtate, are duly and properly adminiſtered, and be informed when incidental ſymptoms occur, that, if violent, they may be immediately relieved. Should the practitioner be inattentive to his patients, he can-

not, in reaſon, blame his aſſiſtants if they are careleſs, nor the officious nurſe and ignorant attendant for diſobedience.

We have already forewarned practitioners againſt an expectation that bark will prove infallible. We muſt alſo acquaint them, that it will very ſeldom cure ſhip fever as ſoon as it cures fever in hot climates, not ariſing from virulent infection, more eſpecially ſhould the patients have been ill ſeveral days before they complain, for reaſons hereafter to be explained. Nor are they to imagine that a few paltry half drachms will cure them, leſt they add to the number who unjuſtly report, "That the bark failed them." What quantity, or how long it may be neceſſary to give it, muſt depend on the virulence of the infection, the climate, ſeaſon, age, ſex, and conſtitution of the patient, and other circumſtances, and particularly the goodneſs of the bark. Conſequently, in adminiſtering it, regard is to be paid only to the effects, and not to the number of doſes, *nor the colour of the bark.* As in the deſcription of the fever, though a faithful copy of nature, collected from many hundred caſes, it is impoſſible to mark it with all the features of every caſe which may occur

to the reader; ſo we wiſh to be underſtood, in our directions for adminiſtering bark, which 'tis probable will ſucceed in moſt caſes, that it is impoſſible, and would therefore be empiriciſm, to lay down abſolute rules for all circumſtances.

SECTION VII.

Of Diet.

WHEN diet becomes neceſſary, the moſt ſuitable that circumſtances afford muſt be adminiſtered, often in ſmall quantities, without regard to hours or faſhion. Wine may then, very properly, be given as part of the diet. Indeed, bark is not more ſuperior to other medicines in curing fever, I am convinced from long experience, than wine is to all other cordials. It is very often neceſſary to adminiſter it throughout the fever; and, when judiciouſly managed during the convaleſcency of the patient, it will be found the beſt corroborant and antiſcorbutic.

The human ſyſtem is ſo variouſly formed, and the circumſtances under which we exiſt, ſo extremely diverſified, as to render attention to *every caſe* neceſſary. Hundreds of caſes, I ſay, which have fallen under our obſervation, might be related; yet the reader may never meet with one perfectly ſimilar to either of them, or that may not require ſome variation in the management. Like the patients themſelves, though they are all men, how widely do they differ in features, conſtitutions, ſtrength, &c.! Let the reader remember, therefore, that, after the manner of ſome painters, we have only drawn the outlines; the finiſhing of the piece muſt be left to their own ſkill and judgment; and with theſe, to do it with tolerable ſucceſs and ſatisfaction to themſelves, they muſt unite the daily efforts of the moſt vigilant attention.

CHAP. XI.

CASES *to illuſtrate the Management of the* FEVER.

AS the following Caſes are intended to illuſtrate the different heads under which we have reduced the management of

ſhip fever, it is not to be expected that order, as to time when they occurred, will be regarded.

SECTION I.

Of Blood-letting.

MY obſervations do not furniſh me with a ſingle inſtance of fever being cured by letting blood only. For what I have to ſay further on this head, I refer the reader to the firſt ſection of the laſt chapter.

SECTION II.

Of Vomiting.

WE have already repeatedly obſerved, that if vomits be adminiſtered when the firſt ſymptoms of contagion are perceived, or during the cold, or the ſhivering fit of the firſt paroxyſm, they frequently prevent, and even cure the fever.

CASE

CASE I.

Rober Dean, aged about 20 years, ſoon after he came from the Conqueſtadore guard-ſhip at the Nore, complained on the 10th of September, 1779, of ſhivering, ſickneſs at ſtomach, head-ache, and univerſal pains, eſpecially of the loins. A vomit was immediately adminiſtered, which vomited well, and procured a copious ſtool or two. He ſlept well, the ſymptoms were carried off, and next day he only felt himſelf a little weaker than uſual. I gave him two doſes of the bark, with fifteen drops of elixir of vitriol, and on the day following he returned to his duty, quite well.

CASE II.

Mr. Knight, about 32 years of age, a temperate man, complained on the 19th of September, 1779, of head-ache, ſickneſs at ſtomach, and thirſt; the pulſe was rather quicker, and the ſkin hotter than natural; he had not perceived any chillineſs or ſhivering to

precede theſe ſymptoms. I gave him an emetic, and next day he was perfectly well.

CASE III.

Chriſtopher Forſter, aged about 19, complained on the 2d of October, 1779, of alternate chills and heats, head-ache, univerſal pains, and thirſt. A vomit was immediately given; the 3d he found a little weakneſs, took the bark twice, and returned the 4th to his duty.

CASE IV.

John Oſborne, an Eaſt-India mulattoe, aged about 18, was ſeized the 16th of October, 1779, with all the general ſymptoms of fever. I preſcribed the vomit immediately; the next day he was ſo well, that I ordered a light diet only for him; and on the 18th he returned to duty.

Many other caſes might be inſerted to prove the great advantage of giving vomits on the firſt attack of fever.

SECTION III.

Of Sudorifics.

WHEN the vomit did not carry off the ſymptoms entirely, the patients have been frequently cured by a ſudorific.

CASE V.

Joſeph Clun, aged about 28, was ſeized on the 18th of October, 1779, with the general ſymptoms of fever; and not being entirely freed from his complaints by a vomit, which he took immediately, I ordered him a ſudorific:—next day he complained of a ſlight debility only. He took fifteen grains of cort. eleuther. twice, and returned to his duty on the 20th.

CASE VI.

James Thacker, aged about 23, was ſeized the 23d of November, with the general ſymptoms of fever; and for the ſame reaſon as in the preceding caſe, a ſudorific was given at

bed-time. On the 24th, being free of the ſymptoms, but weak, I gave him a few doſes of bark, and next day he returned to his duty.

SECTION IV.

Of Bliſters.

WE might inſert many caſes to ſhew the great benefit derived from an early application of them; but as repetitions are tireſome, we ſhall only mention four.

CASE VII.

Michael Irving complained on the evening of the 5th of February, 1780, of the general ſymptoms of fever, for which he took a vomit, and the ſudorific at bed-time. There was a remiſſion next morning, but in the afternoon an exacerbation came on with headach :—Matutino cath. mite cepit, et pm. veſicat. inter ſcapulas admovi.

On the 7th he was perfectly free of complaints, except from the pain of the bliſter, and

and he returned to duty as ſoon as his back was well.

CASE VIII.

John Putnam, aged about 37, was ſeized with the general ſymptoms of fever on the evening of the 23d of May. A vomit and ſudorific were preſcribed, and next day the cathartic, and at night the ſudorific was repeated. On the morning of the 25th there was no remiſſion; the head-ache, giddineſs, ſickneſs at ſtomach, and wandering pains, diſtreſſed him greatly. I ordered him the bark every three hours, and a bliſter to be applied between his ſhoulders. He paſſed the night ill from wandering and inquietude; but there was a remiſſion of all the ſymptoms in the morning, and no return of them afterwards. The bark was continued, though ſeldomer, until he returned to his duty.

CASE IX.

James Farrel, a marine, aged about 26, complained on the 20th of June, 1780, of the uſual ſymptoms of fever, for which he

took the emetic and cathartic together, and the ſudorific in the evening. The 21ſt the headache and proſtration of ſtrength and ſpirits continued. I applied a bliſter between the ſhoulders, and ordered him the bark. On the 22d he was free of every complaint but debility, and had no return of the ſymptoms.

The bark was preſcribed until his back was healed.

CASE X.

John Howe, about 25 years of age, was ſeized on the 27th, but did not complain until the morning of the 28th of June, 1780, of the uſual ſymptoms of fever, and immediately took the emetic and cathartic together; and P M I ordered him the bark. On the 29th there was no remiſſion, though he had been vomited, purged and ſweated by his medicines, and the countenance was much diſeaſed; the bark was continued four times in the day, and a bliſter applied between his ſhoulders. On the 30th he complained of the bliſter only, and never had any return of the fever, but took the bark twice or thrice until his back healed.

SECTION V.

Of Cathartics.

ALTHOUGH it does not occur to me that I ever ſaw a patient cured of fever by cathartics alone; yet I have often found it neceſſary to preſcribe them after both the vomit and ſudorifics to perfect the cure. We ſhall only inſert two or three caſes.

CASE XI.

Mr. Mitchel, aged about 22, a ſtrong, healthy young man, having on the 5th of October, 1779, been on duty on board the Dunkirk guardſhip, where the ſhip fever was very virulent, the day following he complained of fever; the pulſe was quick, and the ſkin hot and dry; his head ached, and he was much haraſſed with griping and purging. I ordered him a vomit and diluting drinks. On the 7th he was greatly relieved, after the vomit, which operated likewiſe by ſtool and perſpiration, but the dyſenteric ſymptoms were not gone; he therefore took a cathartic, and returned on the 8th to his duty.

CASE XII.

Richard Sullivan, about 25 years of age, complained the 4th of November, 1779, of ſhivering, head-ache, and purging. An emetic was adminiſtered; and next day, as the purging was not quite gone off, he took a gentle cathartic, and returned to duty on the 6th.

CASE XIII.

John Cummings, aged about 24, was ſeized on the 9th of November, 1779, with alternate chills and heats, head-ache, and univerſal pains. I immediately gave him the vomit, and ſudorific at bed-time. The 10th, the head-ache and univerſal pain, though alleviated, were yet troubleſome; I preſcribed a cathartic, and next day he found himſelf perfectly well.

SECTION VI.

Of Bark.

AS upon this we placed our chief dependence for the cure, we muſt neceſſarily be more

particular on it, than we have been on any of the former. We ſhall, therefore, ſhew how innocent and effectual it is, when given in the beginning of fever, without either an emetic or cathartic having been preſcribed before, or with it, and inſert a few caſes, out of many hundreds, which we have ſucceſsfully managed by adminiſtering bark early and liberally; and conclude with a few inferences.

CASE XIV.

George Alexander, aged about 36, ſomewhat ſlothful, was ſeized on the 25th of October, 1779, with great proſtration of ſtrength and ſpirits—or faintneſs, as he expreſſed it. On the 26th, about 11 AM he was brought to me, immediately after he had recovered out of ſyncope, into which he had fallen ſome time before. His complaints were extreme weakneſs and laſſitude, and confuſion of the head; the countenance was greatly diſeaſed, the pulſe languid, and ſkin cold; a vomit was ordered, and two drachms of bark to be taken an hour after the vomiting, and to be repeated thrice in the afternoon. In the evening there was an exacerbation of heat and thirſt.

27. The fever was very moderate in the morning, and he complained but little of his head, and univerſal foreneſs, after having had a good night. I ordered his bark to be continued.

28. He felt himſelf eaſy, though weak, and had very little fever or thirſt on him. An ounce of bark was again preſcribed, and half an allowance * of wine. He afterwards continued to take his wine, and half an ounce of bark daily, until he returned to his duty on the 1ſt of November.

CASE XV.

William Hogarth, aged about 18, bloated and of a lax fibre, on the 14th of January, 1780, was ſeized with head-ache at one A M which abated again, and about 10 P M he fell down on the deck in ſyncope. As ſoon as he was recovered out of it, by the uſe of ſp. C. C. he took a vomit.

15. He paſſed an indifferent night, complained of great pain acroſs the os frontis; the tongue was beginning to grow black, and

* 'Tis about ſeven ounces by meaſure.

the lips to be covered with ſordes; the pulſe was very quick, and the ſkin and muſcles were exceeding hot, and preternaturally ſoft and relaxed. In the morning I ordered the uſual cathartic, as he had no ſtool by the vomit. At 11 I was informed he had again fallen into ſyncope. Cort. ʒij. was preſcribed every two hours.

16. He complained of debility and a little giddineſs, and was ordered to take his bark every three hours. P M he was at his quarters during the action with the Spaniſh fleet, and had no return of the fever, nor took any more medicine.

CASE XV.

Lieut. S——s, aged about 31, of a hale conſtitution, was ſeized, on the 26th of October, 1779, with heavineſs, laſſitude, ſtretching of the extremities, chilline ſs, and pain, with a little ſwelling and hardneſs of the right groin. I propoſed a vomit, which he declined taking; and at 3 P M a ſevere ſhivering came on with head-ache, univerſal pains, eſpecially lumbago. He now took a vomit; a hot fit, with an exacerbation of the ſymptoms,

toms, ſucceeded; and at night he took five grains of ſal. C. C. and half a grain of opium, in the form of a bolus.

27. He was ſomewhat relieved by the vomit, but more by a free perſpiration through the night; the groin was much better; however, the head-ache continued, and he was coſtive. In the morning he took the common purge of ſalts and cream of tartar, and in the afternoon two drachms of the bark, twice, with a little wine and water.

28. He found himſelf recovered after a good night; and the bark was repeated, four times, as he had taken it yeſterday. He had no relapſe, and took his bark twice a-day for a few days, though he returned to his duty on the 30th.

CASE XVII.

William Coates, about 22 years of age, of a thin habit, after drooping ſome days, complained, on the 5th of November, 1779, A M. of a ſore throat; he ſpoke through his noſe, and ſeemed to have much difficulty in ſwallowing; the uvula and tonſils were much tumified, and the pulſe was much quicker and

weaker than natural. The vomit was given, and in two hours after its operation, the cathartic. P M a blifter was applied between his fhoulders, and a fudorific given him at bed-time, after ufing the pediluvium.

6. He was much relieved, but coftive; the cathartic was repeated in fmall dofes, until it operated. P M he continued eafier, having perfpired all day. I ordered the bark to be given him twice in the night.

7. The pulfe was firmer, but he complained of more pain in the left fide of the throat, and the tongue was foul. Cort. ʒij. quinquies in die dedi.

8. He paffed the night ill from the pain and urgent cough; the pain now extended from the thyroid gland down to the fternum, and the pulfe was quick and fmall. P M he complained of alternate chills and heats.—Corticem ut heri præfcripfi.

9. The pain remitted. P M he had very irregular or uncertain fweats and remiffions through the day.—Corticem adhuc cepit, et gargarifmo fæpe utitur.

10. Exacerbation of the pain of the left fide, and cough. Cort. ʒ ij. quater fumat.

11. Remiſſion, after having paſſed a good night. Sal. cath. amar. ʒ ß. capiat:—aliter ut heri.

12. He continued better, but the cough was teazing at times. Cort. ʒi. ter capiat. The cough did not leave him until the 20th, and during that time he took the bark twice a-day, and an emollient linctus was preſcribed.

CASE XVIII.

William Crane complained on the 8th of November, 1779, of having been ſeized the day before with alternate chills and heats, and ſore throat; the tonſils and uvula were now much inflamed, and covered with an exudation of ſerum, aſſuming the appearance of pus; the tongue was foul, and the pulſe was quick. Emetic. et cathartic. ſimul ſtatim dedi; et deinde cort. ʒi. ſecunda quaque hora cepit, et gargariſmo utitur.

9. He perſpired in the night, but the throat continued painful, and the pulſe was ſmall and quick; the tongue looked as if it had been ſcalded. Cort. ʒij. quinquies in die, et gargariſmum præſcripſi.

10. There

10. There was a remiſſion of all the ſymptoms. Ut heri medic. quater cepit.

11. He continued better. Cort. ʒi. quater, et ſal. cath. amar. ʒ ß. matutino adhibui.

12, 13. He took his medicines, and returned to duty on the 14th.

CASE XIX.

Barney Clare, on the 5th of November, 1779, was ſeized with, and complained of the general ſymptoms of fever. I ordered the emetic. P M a violent exacerbation came on, with very acute pain in the lower part of the left ſide of the thorax; the pulſe was quick, hard, and full, and the ſkin very dry and hot. The vomit gave him ſeveral ſtools, and he took a ſudorific at going to-bed, and uſed the pediluvium.

6. No remiſſion in the morning, though he ſweated profuſely throughout the night; the tongue becoming black. Sal. cath. amar. ʒ ß. cort. ʒ i. mane dedi; poſteaque cort. ʒ ij. tertia quaque hora præſcripſi.

7. Remiſſion of the pain, but he complained of head-ache, ſore throat, and hoarſeneſs, which were exaſperated by cough. An

angry eruption broke out about the mouth; however, the pulſe was firmer, and his ſkin and tongue were moiſt.—Cort. ʒij. quinquies dedi.

8. His complaints gradually remitted, and he paſſed a good night. Ut heri præſcripſi. P M an exacerbation came on, with acute pain of the ſide and cough.

9. About ten laſt night there was a remiſſion, and he paſſed a good night; the eruption drying about the mouth. Cort. ſexties in die capiat.

10. He ſlept well in the night, but a ſlight exacerbation came on. Cort. ut heri præſcripſi.

The cough was urgent at times, but he had no return of the pain of his ſide, or of fever, and he took his bark until the 15th, when he returned to duty, gradually diminiſhing the number of doſes as he recovered.

CASE XX.

Mr. Boon, aged about 32, generally expoſed to much fatigue, after drooping about eight days, was ſeized with acute pain in the left breaſt, which was always affected, he ſaid,

ſaid, when he was indiſpoſed, and was ſeverer at ſome times than at others, with univerſal pains, heat and thirſt, two days before he complained, on the 5th of March. A vomit was ordered, which beſides operating gave him ſeveral ſtools; and the bark was adminiſtered in the afternoon.

6. He reſted ill from the ſeverity of pain at times through the night, and his tongue was foul. I preſcribed the bark every two hours: P M an exacerbation of heat coming on with pain, he took a doſe of the bark, which he told me (and ſpoke it with pleaſure) carried both off in ten minutes after.

7. He enjoyed a good night, and had no conſiderable exacerbation afterwards. The bark was continued until he perfectly recovered ſtrength on the 20th.—This patient had the fever three different times, accompanied with the pain of his breaſt, and always recovered by the ſame management.

CASE XXI.

Jas. Morris complained on the 7th of May, 1780, of irregular chills and wandering pains; the countenance was ſallow, and

bloated, and he ſeemed to breathe with ſome difficulty.—Ipecac. gr. v. dedi, et pm. ſal. cath. amar. ʒi. et cort. ʒ ij. bis dedi. He had a fetid ſmell about him.

8. He paſſed the night ill from inquietude, head-ache, and univerſal pains. Cort. ʒi. ſecunda quaque hora dedi, et ſal. cath. amar. ʒ ß. mane.

9. The fever remitted, but he complained of the other ſymptoms, and of frequent cough. Ut heri præſcripſi.

10. Exacerbation of pains, eſpecially about the thorax, dyſpnœa, an urgent cough, and expectorated with difficulty a viſcid bloody phlegm; his breath was very fetid, his throat being much diſeaſed; the tonſils and uvula were enlarged, and covered with a bloody ſanies; and he had a diſagreeable ſmell about him, and was always coſtive. Cort. ut heri atq; mann. ʒiſs.—vel ſal. cath. ʒi. et ſucc. lemon. recen. ʒiv. utitur. P M the tongue began to put on the moſt diſeaſed appearance I have ſeen ſo early in the fever.

11. Pain of the left ſide affecting reſpiration, with an urgent cough, and no remiſſion in other reſpects.—Veſicat. lateri admovi, aliter ut heri, atque vino.

This

This man, before he recovered, had ſeveral relapſes, and was at laſt ſcorbutic, before he returned quite well to his duty on the 28th of June.—He uſed a good deal of bark and lemon juice, and had alſo ſeveral bliſters applied during that time: the diſcharge from the firſt was a yellow gelatinous ſubſtance.

CASE XXII.

Mr. Dixon, aged 22, of a ſtrong habit, and one of my aſſiſtants, drooped for two days with chilline ſs, foreneſs and fullneſs about the throat, a loſs of appetite, and complained the evening of the 6th of July of ſuch exquiſite univerſal foreneſs, that touching any part with his finger gave him pain; great laſſitude and depreſſion; the tongue was whitiſh, the pulſe was quicker, and ſkin hotter than natural. He immediately took a vomit, and a ſudorific when he went to bed.

7. The fever rather increaſed through the night, although he had ſweated profuſely. A purging draught was ordered A M, and the bark to be taken P M, which he neglected. P M there was no remiſſion; the heat, thirſt, and univerſal pains, with profuſe ſweat-

ing, were diſtreſſing, and he was coſtive. Pediluvio utitur.

8. No remiſſion, though he had ſeveral ſtools in the night; the ſweating ſtill continued, and was profuſe when he moved in bed. Cort. ʒi. ſecunda quaque hora, atque vini pauxillum dedi. P M he moaned, ſighed, often vomited, and purged, was apprehenſive of dying, but ſweated leſs. Anod. h. ſ. et veſicat. inter ſcap. admovi.

9. He paſſed an indifferent night from a continuation of the ſymptoms. A M he craved ſmall beer at one time, and milk at another;—there was a ſlight hæmorrhage from the right noſtril. Cort. (10ma hora am. atque alum. gr. x.) ut heri, atque opij gr. ß. vel gr. i. ut viſum præſcripſi. The diſcharge from the bliſter was a yellow ſerum.

11. The remiſſion of the fever was more diſtinct, but he complained as uſual of all the other ſymptoms. Cort. atque opium et vinum, ut 9no præſcripſi, et crem. tart. gr. xv. P M he was entirely free of fever, and a little blood, quite cold, came from the right noſtril. He never had any return of the fever; however, he complained of retching, and of exacerbation of the pains for ſeveral days at times;

therefore continued his medicines on the 11th, only diminiſhing the number of doſes gradually, and inſtead of opium, the laſt two or three days of his illneſs, I ordered him ſp. C. C. gut. x. with every doſe of his medicine, and more wine.

CASE XXIII.

Mr. Blake, aged about 22 years, of a ſtout make, and robuſt conſtitution, was ſeized on the 13th of June, about noon, with a ſevere paroxyſm of fever, which terminated in a remiſſion about ſix P M by ſweat. It was then he complained; the head-ache, univerſal pains, eſpecially lumbago and debility, chiefly diſtreſſed him. I ordered him cort. Peruv. p. ʒij. immediately, and to be repeated before he went to bed.

On the 14th in the morning he was much relieved, and in the courſe of the day took an ounce of the bark.—The day following he returned to his duty, and never had a relapſe.

CASE XXIV.

Mr. R. aged about 38, of a healthy, tho' delicate conſtitution, temperate in his living, and well accuſtomed to different climates, without

without being affected by them, arrived at Gibraltar on the 19th of January, 1780, in perfect health; but no ſooner did the wind veer round to the eaſtward, than he was ſeized with the ſymptoms of fever; and thoſe were always increaſed when it blew a Levanter *. As long as this gentleman remained there, he was regularly affected by thoſe winds, and conſtantly relieved by a liberal uſe of the bark, without giving any medicine previous to it: ſometimes about a ſixth or a fourth of a grain of emetic tartar was joined with it. He varied his diet and living as little as poſſible.

On the 10th of April, the wind then N W and weſterly, blowing ſtrong at noon (having for a conſiderable time before been much expoſed to infection among the priſoners in the hoſpital, where his duty led him), he felt the pains coming on about eight in the evening, to which he had hitherto been ſubject only during the approach and continuance of the eaſterly winds; and expecting the change of weather, he continued doing his duty, and took a little tincture of bark twice.

* When the wind blows ſtrong from the eaſtward, it blows down off the rock in ſlurries.

On the 11th, the pains were more ſevere and wandering; at one moment he had the ſenſation of being extremely fatigued, and the next he was ſo eaſy that he forgot them; ſometimes there was an unuſual heat in the ſkin; but the pulſe was very little affected. He took the tincture of bark as he had done yeſterday; went with languor about his duty, and imprudently walked and ſtood a good deal in the ſun; and afterwards went off in a boat during the ſtrength of the ſea-breeze. He could eat little dinner from the fatigue, and paſſed the night indifferently, the pains being increaſed.

12. Finding himſelf worſe, the pulſe rather weaker than natural, and irregular, together with a ſlight nauſea, he took tinct. cort. ℥ ß. tart. emet. gr. ¼. thrice AM. However, perceiving a chillneſs come on at ten AM, he began with the bark in ſubſtance. Pulv. cort. Peruv. ℈iv. tinct. cort. ʒij. aq. vel infuſione theæ ʒij. ſtatim cepit. At 11 he was not colder, and repeated his medicine. He was ſo diſtreſſed with fever, ſeverity of pains, and headache, that he lay down in bed at noon; ſoon after, he repeated his draught with ſal. ſuccin. gr. viij. and drank freely of warm tamarind

beverage. The heat became vehement, the pulſe was ſtrong and rapid, and the pain darted violently from one place to another during the hot fit, which was ſucceeded by a profuſe ſweat, and followed gradually by a remiſſion about four P. M. Notwithſtanding the ſeverity of the paroxyſm, neither his reaſon nor ſpirits were the leaſt affected; but he was aſtoniſhed to feel himſelf ſo extremely weak, and the head ſo greatly diſeaſed, though not pained when he got out of bed at four. He repeated his bark thrice, and took x. grains more of ſal. ſuccin. when he went to bed at eight o'clock, having firſt had a copious ſtool.

13. The remiſſion continued, and became more diſtinct. The head ſeemed greatly diſturbed, after he had enjoyed a tranquil and very pleaſing night; and though extremely weak, he went about his duty on board, taking bark every two hours.

14. He had a good night, continued the bark, and with the firſt doſe took an ounce of ſalts, and two drachms of crem. tart.—He perſiſted in taking bark, and never had any return of the fever while he lay at Gibraltar, but did not recover his ſtrength until he left it on the 20th; and ever ſince he has en-

joyed a good ſtate of health. At bed-time on the 12th, and on the evening of the 13th, he took ten grains of ſal. ſuccin. without any perceptible effect.

CHAP. XII.

TABLE I.

Shews the Number of FEVER PATIENTS *on board of the Edgar, between the 1ſt July, 1779, and the 7th May, 1782; the Number who died; and the Proportion of Deaths.*

Fever Patients.	Died.
869 *	9 †
* Beſides myſelf and others who were not on the liſt, and a number of priſoners.	† But it is allowed that the bark failed in two caſes only, and one of theſe drooped a week before he complained, and had been long ill before. One died by drinking wine; two I ſaw only twice while they were ill. Hæmorrhage, neglected by the attendants, occaſioned the death of one; one fell out of his hammock in the wet, which cauſed his death; and two neglected the diſeaſe, till it was too far advanced.
Proportion of Deaths.	
Out of 869 patients—admitting 9 died	1 in 92 nearly.
Out of 804—‡ admitting 2 deaths only	1 in 402

‡ The other 7 who died, for reaſons ſtated in the note, and the 58 ſent to the hoſpitals, are ſubtracted.

TABLE II.

Shews the Number of FEVER PATIENTS *admitted into Gibraltar Hoſpital * between the 19th of January, and the 20th April, 1780, from his Majeſty's Fleet; the Number who died; and the Proportion of Deaths.*

Fever Patients admitted from the Fleet.	Died, beſides thoſe who were ſeized with Fever at the Hoſpital and died.
570	57
Proportion of Deaths.	1 in 10

TABLE III.

Shews the Number of SPANISH PRISONERS *admitted into the ſaid Hoſpital within that Time; the Number who died; and the Proportion of Deaths.*

Priſoners admitted.	Died, beſides 2 in the launches, and 2 immediately after they landed, when they went from the Hoſpital to Spain.
437	33
Proportion of Deaths.	1 in 13, and 8—33

* The practice in this Hoſpital was the antimonial and camphire treatment, until it was altered by my advice; for which the Surgeon thanked me afterwards very reſpectfully, and told me that he ſoon perceived the good effects of the bark treatment. Any inference from a comparative view of the ſucceſs of the different treatments may be thought unfair, becauſe the worſt caſes only are *generally* ſent to an hoſpital. This is admitted; and at the ſame time 'tis requeſted of the reader to point out any other method of comparing them that is not liable to objections.

TABLE IV.

Shews the Number of FEVER PATIENTS *ſent from the Edgar to Haſlar Hoſpital, between the 9th October, 1779, and the 7th May, 1782; and the Proportion of Deaths at different Periods.*

Number of Fever Patients ſent.	Died.
43 *	3
Proportion of Deaths.	1—14 nearly.

TABLE V.

Shews the Number of FEVER PATIENTS *ſent from the Edgar to Gibraltar Hoſpital, and the Proportion of Deaths between the 19th January and the 20th April, 1780.*

Number of Fever Patients ſent.	Died.
11	3
Proportion of Deaths.	1—4 and more.

Of the other four Fever Patients ſent to the different Hoſpitals, none died.

TABLE VI.

Number of Fever Patients ſent to Hoſpitals from 24th May, 1779, to 7th May, 1782.	Died.
58	6
Proportion of Deaths.	1—$9\frac{4}{58}$

* Dr. John Lind made trial of many different medicines in Fever caſes at this Hoſpital. The event, 'tis hoped, will be made known to the public in due time by that Phyſician.

CONCLUSION.

IT will, no doubt, have ſtruck the reader, that petechiæ, as before mentioned, were never obſerved on board the Edgar, becauſe it is a ſymptom which has been conſidered inſeparable from jail, hoſpital, or ſhip infection; and it will alſo have ſtruck him, that this infection was long on board of the Edgar, and frequently renewed after being nearly deſtroyed. Theſe are at leaſt evident, from the hiſtorical facts we have ſtated. Is it probable then, that petechiæ not appearing could proceed from any other cauſe than the ſingular method of treatment of the Fever with Bark?

What we have further to ſay on this head, the reader will ſee in our Eſſay on Febrile Infection, where it will more properly appear.

PART III.

OBSERVATIONS *on* DISEASES *on board his Majesty's Ship* ROMNEY.

INTRODUCTION.

WE shall, with as much conciseness as perspicuity will admit, lay before the reader the state of His Majesty's ship Romney's Sick List, from the 8th May to the 31st of December 1782; that he may see a further trial of the doctrine and practice recommended in the preceding Observations. And as repetitions are tiresome, we shall insert only one case, that which terminated fatally; and refer the reader to our Essay on Febrile Infection for what we have further to add on the treatment of fever.

The Romney is a fourth rate, whose complement was 367 men, and was employed on Channel service during that time.

CHAP.

CHAP. I.

MONTHLY REVIEW *of the* ROMNEY'S SICK LIST, *from the 8th May until the 31ſt of December* 1782, *and Meteorological Obſervations.*

MAY.

THE ſhip was docking, and moſt part of the ſhip's company were on leave. Captain Lewes ſuperſeded Captain Wickey in the command of the ſhip.

JUNE.

The number of patients were 48, viz. one of meaſles; thirty-two of influenza; one of rheumatiſm; one of ophthalmia; two of itch; one of ſtrain; one of rupture; one of hydrocele; ſeven of contuſion; one of wound; and one of abſceſs. Sent one with meaſles to the hoſpital. During the laſt, and this month, the influenza was highly epidemic throughout Europe, as far as I could learn. Various were the opinions of phyſicians concerning its origin or cauſe; ſome attributing it to infection; and others to the extremely

variable and cold wet ſpring, of whom I acknowledge myſelf to be one. That it did not proceed from infection is almoſt a moral certainty, as will appear obvious from what follows.

Hundreds in different ſhips, towns and counties, which had no communication with one another, were ſeized nearly as ſuddenly, and ſo nigh the ſame inſtant, as if they had been electrified. The caſe was the ſame in different kingdoms, whether ſituated on the continent or on iſlands, as far as can be learned. The companies of many of the ſhips were very well at bed-time, and in the morning there were not hands enough able to do the common buſineſs of the ſhip. No rank or ſtation was exempted; few eſcaped its effects any where. To reconcile this inſtantaneous effect to ſuch a cauſe as infection, exceeds poſſibility; but that, in an advanced ſtate, it might infect people coming nigh the ſick, I will not contradict, becauſe I believe it.

The management of the influenza depended wholly on the practitioner's idea of the cauſe; and the ſucceſs depended upon the treatment. Many conſidered it purely inflammatory, and

therefore adopted the whole antiphlogiſtic plan, under which vaſt numbers periſhed—either immediately, or afterwards by conſumption.

The method which I recommended to the few caſes which fell under my care, for they did not exceed 60 on ſhore and on board, was a linctus, compoſed of ſal. am. cr. ſubacids, anodynes, and a very ſmall proportion of antimonial,—food of eaſy digeſtion, and a moderate quantity of diluted wine; or beer for the men, keeping them out of bed, and the body moderately warm.

The medicine in ſome caſes cauſed retching; and in every caſe it moderated the cough, kept the body ſoluble, and the ſkin moiſt; and they recovered in a ſhort time.

I took bark in ſubſtance myſelf as a preventive, and ſcarcely perceived a ſymptom of it; and a perſon of my acquaintance told me, that he took tincture of bark every day, at the time it raged, and never felt a ſymptom of it. On board the Romney, two or three were let blood without my knowledge; but none of them were let blood after that.

About this time, a child died on board of

the meaſles before I knew of it, and communicated the infection to the people.

JULY.

72 complained in all,—viz. eighteen of fever; eight of meaſles; ſix of influenza; two of head-ache; one of rheumatiſm; two of ophthalmia; one of eryſipelas; one of eruption; one of epilepſy; one of cough; one of ſcrophula; two of itch; one of ſtrain; thirteen of contuſion; one of fracture; two of wound; four of inflammation; one of abſceſs; four of ulcer; and two accidents.—The one was a man found lying on a cheſt, dead, with his head hanging over the end of it; his face downwards reſting on a wadnet; the ſkull of the other was broke in pieces by a fall from the main yard down upon the ſtarboard ſteps on the ſhip's ſide. Sent one with ulcer; five with meaſles; one with inflammation, topical; one with fever; and one L. V.—9 in all. There were 14 in the liſt at the end of the month. We ſailed the 20th, Commodore Elliot on board, with his broad pendant hoiſted, and commanded a ſmall flying ſquadron. As we cruiſed in the Channel only, I have paid no regard to the weather.

I bought

I bought onions for the ſick; and the Commodore ſent me ſome lemons for them.

AUGUST.

The Liſt decreaſed conſiderably—6 only complained of fever; one of pleuritis; four of head-ache; three of cholera morbus; two of rheumatiſm; one of hypochondria; one of ophthalmia; one of eryſipelas; one of eruption; two of cough; one of itch; one of ſore throat; one of ſcald; five of contuſion; three of wound; one of inflammation; two of furuncle; five of abſceſs; and two of ulcer.—43 in all. Sent two with inflammation, and one with ſcrophula, to the hoſpital. One of the fever patients of the 7th ult. died 13th, who had been long ill, and was very ailing.—6 lame patients only in the liſt at the end of the month. 14th. We anchored in Plymouth Sound, ſailed to Cawſand Bay the 22d, and ſailed from thence on the 30th.

SEPTEMBER.

The number of ſick increaſed only one—44 having complained, viz. ſix of fever; two of pleuritis; two of nephritis; one of head-

ache; one of giddineſs; one of belly-ache; one of rheumatiſm; ſix of ophthalmia; two of cough; one of dyſpnœa; four of ſtrain; one of rupture; one of hydrocele; ten of contuſion; one of inflammation; one of furuncle; and three of ulcer. Seven were ſent to ſick quarters, viz. one with pleuritis; one with head-ache; one convaleſcent after meaſles; one with cough; one with hydrocele; one with lameneſs from old wound; and one with ulcer.—19 in the liſt at the end of the month; a conſiderable increaſe.

8th. We anchored at Guerniſey, and heard of the Royal George being upſet at Spithead. 12th. We ſailed, and anchored at Jerſey. 16th. It blowed a ſtrong gale. 21 Cartel men and two priſoners came on board, moſt of them in a ſhabby condition. They were waſhed, had clean ſlops and bark. 18th. We ſailed, and anchored at 2 P M on the 19th at St. Helens. 20th. We anchored in the Downs. 28th. We ſailed, and anchored at Dungeneſs. Query—What could occaſion ſo many ophthalmic caſes?

OCTOBER.

Nine complained of fever; one of pleuritis; one of nephritis; two of head-ache; three of belly-ache; two of ſcurvy; two of rheumatiſm; one of hypochondria; one of ear-ache; one of cough; one of ſcald; two of rupture; five of contuſion; two of wound; one of inflammation; one of furuncle; two of abſceſs; and three of ulcer.—38 in all. Sent 12 to the hoſpital, viz. one with belly-ache; one with rheumatiſm; two with cough; one with ſcurvy; one with abdominal obſtruction; one with contuſion; two with rupture; and three with ulcer.—11 in the liſt at the end of the month.

We ſailed the 1ſt, and anchored again in the ſame place the 2d. Sailed the 4th. We took a privateer, and got her people on board the 17th. Anchored in Portland Road the 19th, and arrived at Spithead the 20th, with three ſick, and a few lame patients only in the liſt. The Diligente guardſhip at Spithead is very ſickly; and I am informed the Flora is alſo very ſickly in the harbour, from bringing over new raiſed men from Ireland. Eight of the nine fever patients were added

at the end of the month, which I believe proceeded from one of our men going on board the Diligente the 24th on liberty. A meſſmate of his was ſeized the 25th, and himſelf on the 31ſt, with fever. Another inſtance of the bad effects of allowing the people to viſit on board of ſickly ſhips.

NOVEMBER.

69 Patients complained; viz. twenty-ſeven of fever; two of pleuritis; one of parotis; three of head-ache; two of rheumatiſm; one of ophthalmia; one of aphthæ; one of erysipelas; two of eruption; four of cough; one of diarrhœa; two of ſcald; ten of contuſion; one of diſlocation; five of wound; three of inflammation; one of furuncle; and two of abſceſs.

Ten of the fever patients were ſent to the hoſpital on the 5th, as we were to ſail the next day.—13 in the liſt at the end of the month.

6th. We ſailed, and anchored at St. Helens. 7th. We ſailed, and anchored the 27th at Torbay. 30th. We ſailed.

Retching was a very urgent and debilitating ſymptom among the fever patients; and

it proceeded from tartar emetic having been given as the emetic without proper caution while I was on ſhore.

General debility was moſtly complained of, and cough; but after I forbad the tartar emetic, and ordered ipecacoan to be given as the emetic, retching was no more complained of. Neither the pulſe nor tongue were much altered, though the infection was ſo virulent as to affect the ſentinels over the ſick. More of the men who were lately come on board, eſpecially from the Lightning fire-ſhip, which I am told was ſickly too, were ſeized with fever than of the old ſtandards.

Pains about the thorax were very frequent and violent; a few of which caſes had a little blood taken away, without being relieved; but a few who had the vena ſaphena opened received benefit, chiefly, perhaps, from the pediluvium being previouſly uſed; for, in the other caſes, the pediluvium was not ſo generally made uſe of as I had directed. On the 10th, one complained of parotis, moſt probably from the infection. Eryſipelatous ſymptoms appeared afterwards in the ſame caſe. All the ſentinels were ſeized with fever.

After the ipecacoan vomit, I opened the body gently, and preſcribed the bark immediately after, with ſuch other medicines as I thought proper;—bliſtered early, and allowed them wine, and thank God they all did well.

My bark was ſo bad, that I was obliged to double the doſe in quantity. From that circumſtance, the general prejudice of practitioners againſt the bark would have been confirmed, and they would have condemned it as ineffectual, if not prejudicial. The pleuritic patient was treated with bark in the ſame manner as the fever patients, and recovered. Five of the men who belonged to the privateer, which we took the 17th ult. entered, and were all ſeized with fever. Two of her people who were ſick, and the ſurgeon, were immediately ſent back. Query—Did this privateer's ſickly people occaſion the fever on board?

DECEMBER.

Nine complained of fever; two of pleuritis; two of head-ache; one of indigeſtion; four of rheumatiſm; one of apoplexy; five of ſcald; one of ſtrain; five of contuſion; five of wound; two of inflammation; one of

abſceſs; and four of ulcer.—42 in all. Sent one for cough the 4th to the hoſpital. He was ſent there the 21ſt Oct. for L. V. and while we were at ſea, was diſcharged on board the Diligente. When he came on board, he was much in the ſame ſtate as when he was ſent on ſhore. 16 on the liſt at the end of the month.

We arrived at Spithead the 2d, ſailed the 6th, and returned again the 20th. About the 21ſt, the Commodore's pendant was ſtruck; and on the 31ſt I left the ſhip.

Captain Lewes was very attentive to the cleanlineſs of the ſhip, and of the men; and readily concurred in every thing which I propoſed, either to prevent or to remove ſickneſs. I had the ſick berth frequently paid with oil of tar, which I purchaſed for that purpoſe; and I had the carlines between decks paid with it ſeveral times.

The 31ſt I was diſcharged.

TABLE.

Shewing the MONTHLY STATE of the SICK LIST from the 7th of May to the 31ſt of December, 1782; the Number, and of what Diſeaſe they died; the Number, and for what Diſeaſe ſent to Hoſpitals; and the Event of Fever Caſes ſent to Hoſpitals.

1782

DISEASES	June	July	Auguſt	September	October	November	December	Number of Diſeaſes	Deaths on Board	Sent to Hoſpitals	Sent for Fever	Died of Fever at Hoſpitals	REMARKS.
Fever		18	6	6	9	27	9	75	1	11	11	2	13 are ſaid on the Hoſpital books to be ſent.
Meaſles	1	8						9		7			
Peripneumonia				1				1					
Pleuritis			1	1	1	2	2	7		1			
Influenza	32	6						38					
Parotis						1		1					
Eryſipelas		1	1			1		3					
Cholera Morbus			3					3					
Belly-ache				1	5			4		2			One was Abdominal Obſtruction
Diarrhœa						1		1					
Indigeſtion							1	1					
Rheumatiſm	1	1	2	1	2	2	4	13		1			
Scurvy					2			2		1			
Scrophula		1						1		1			
Head-ache		2	4	1	2	3	2	14		1			
Giddineſs				1				1					
Epilepſy		1						1					
Apoplexy							1	1					
Aphthæ						1		1					
Sore Throat			1					1					
Cough		1	2	2	1	4		10		4			
Dyſpnœa				1				1				1	
Ophthalmia	1	2	1	6		1		11					
Ear-ache					1			1					
Nephritis				2	1			3					
Hypochondria			1		1			2					
Eruption		1	1			2		4					
Itch	2	2	1					5					
Scald			1		1	2	5	9					
Strain	1	1		4			1	7					
Rupture	1			1	2			4					
Hydrocele				1				1		1			
Contuſion	7	13	5	10	5	10	5	55		1			
Diſlocation						1		1					
Fracture													
Wound	1	2	3		2	5	5	18		1			For lameneſs after it.
Inflammation		4	1	1	1	3	2	12		3			
Furuncle			2	1	1	1		5					
Abſceſs	1	1	5		2	2	1	12					
Ulcer		4	2	3	3		4	16		5			
Accident			2					2	2				
Monthly Number of Diſeaſes	48	72	43	44	40	69	42	358					
Deaths on board		2	1						3				
Number ſent to Hoſpitals	1	9	3	7	12	10	1 1 v			43			
Sent for Fever		1				10					11		They are included in the general number, and are 13 on the books.
Event of Fever Caſes ſent to Hoſpitals												2	

CHAP. III.

REMARKS *on the* MONTHLY REVIEW *and* TABLE.

I HAVE been ſo full in my remarks on the Review and Table repreſenting the ſtate of the ſick on board the Edgar, that I have left nothing to add on thoſe of the Romney. The number of contuſed caſes on board of the latter, is a further ſtriking proof of the weight which my argument, for the ſevere puniſhment of drunkenneſs, ought to have with Captains and Commanders of the Navy. If the method—ſevere puniſhment—which I recommend to prevent drunkenneſs, be thought cruel or tyrannical, I am ready to give it up, provided any other of equal effect is ſubſtituted in its place. But I contend, on the principles of humanity and policy, that the *vice* is productive of ſuch alarming conſequences, that the puniſhment propoſed is in no degree adequate to its flagitiouſneſs; and, therefore, that it even merits the attention of the civil as well as military law.

The ten fever patients were ſent to the hoſpital, becauſe we were going to ſea next day, and upon ſuch ſervice, as might bring us to engage the enemy the ſame night: it would not, therefore, have been prudent to have kept them on board.

Six of the meaſles patients were ſent, to prevent the infection from ſpreading; the other was ſent on ſhore, in a convaleſcent ſtate, for the benefit of milk diet and exerciſe.

As I have already obſerved, perhaps the claſs of head-ache patients, and ſome of thoſe with cough, might be claſſed with the fever patients, as they were treated nearly after the ſame manner, and recovered.

Before any of the people are allowed to viſit on board of a ſhip, at any time, but more particularly in time of war, the ſtricteſt inquiry ought to be made, by the Captains and Officers of both ſhips, whether or not the ſhips' companies are healthy. And the public ſervice ought to render it an object of mutual concern and care, that *a man is neither ſent, nor received*, from either, if there be any men ill of fever, be it ever ſo ſlight, on board.

It is equally remarkable, that no petechiæ appeared on board the Romney, though the

infection was extremely virulent. I see no other way of accounting for it, but the one I have already mentioned *.

CHAP. IV.

SYMPTOMS *of* FEVER *not observed before.*

IN some cases sooner, and in others later, the eyes were so much affected, that they could not bear to look at the light.

Heat in the eyes was much complained of.

The pulse was at times slower, as well as weaker, than natural.

In some cases, the pulse was not discernibly altered from natural.

Appetite immoderate.

CHAP. V.

The CASE *which terminated fatally.*

JAMES MOORE, marine, aged about 25, who had lately been long ailing in Ame-

* See the conclusion of Part II.

rica, complained the 7th July of the general ſymptoms of fever, but more particularly of languor and debility. After the emetic and a gentle cathartic, he took the bark until the 23d, being the 17th of his illneſs; but it is not mentioned how often he took it. He was now ordered to take it four times a day, though he was much better. 18th. Recovering. Ut heri. 19th. He continued to recover. Ut ſupra. 20th. He had neither appetite nor gained ſtrength. Ut 17mo præſcripſi & ipecac. gr. v. mane—& anodyn. h. ſ. cepit. 21ſt. Much the ſame: He only took the ipecacoan to-day through neglect. Cort. cum elix. vit. ſumat quater & anodyn. h. ſ. 22d. No alteration. Ut heri. 23d. His eye-ſight failed him on getting up, through debility, and the pulſe was ſmaller and quicker than natural. Cort. cum vin. cepit & veſic. inter ſcap. admotum fuit pm. 24th. The bliſter prevented his ſleeping, but his pulſe was firmer. Ut heri. 25th. Recovered ſlowly, though evidently better. Ut heri. P M Dyſpnœa from immoderate eating. 26th. On recovery. Ut heri cum ſucc. lemon. 27th. He paſſed a reſtleſs night, countenance fluſhed, and eye lifeleſs. Ut 20mo præſcripſi.

28th. Remiſſion, without vomiting. Cort. & vin. ex rad. ſerp. virg. decoct. ℥iſs. ſumat, & tart. emet. gr. $\frac{1}{8}$ ter, ſi viſum. 29th. He reſted ill from inquietude and ſtarting out of ſlumbers. Ut heri. 30th. He thought himſelf better; the pulſe quicker than natural. Ut heri. 31ſt. His ſleep diſturbed with idle dreams. Ut 28vo præſcripſi (ſine tart. emet.) & columb. gr. x. quater. 32d. He always ſaid he was better; dozed, and the countenance was fluſhed. Columb. ut heri cum vino. 33d. Motion about the mouth as if taſting ſomething; and a ſmall contracted froth ſpit up when he coughed. Ut heri & veſicator. femor. intern. admov. P M pro potion. com. (vernaculo imperial.) cum vin. utitur. 34th. Tremors, cough, and pain in the right breaſt. Ut 28vo, cum ſal. ſuccin. gr. x. & ſp. vol. arom. g. xxx. quinta quaq; hora præſcripſi. 35th. He thought himſelf, and rather looked, better. Ut heri, & cort. opt. ℥i. P M cum vin. & vol. fumat. 36th. The mouth inceſſantly dry, the cheeks livid, and he muttered deliriouſly, the tremors alſo increaſing. Ut heri cum ſal. ſuccin. & veſicator. brachijs internis admovenda. 37th. A wild ſqualid countenance, covered with greaſy ſweat, and

the muttering continued. Vinum ſolum præſcripſi. 38th. He died.

Query. Did the immoderate eating cauſe the relapſe? Were any of the thoracic or abdominal viſcera particularly affected? If any, which of them? His body was kept regularly open. Had bark and wine been preſcribed liberally in the beginning of his illneſs, would he not have recovered? I am of opinion he would; and, therefore, that the bark had not fair play, having ſcarcely ſeen him for ſome time after he was taken ill.

For further remarks on the treatment of Fever, I refer the reader to the preceding chapters, and to the Eſſay.

CHAP. VI.

Shews the Number of FEVER PATIENTS *on board of the* ROMNEY, *between the 8th May and the 31st December, 1782; the Number and Proportion of Deaths.*

Fever Patients.	Died.
75	1 *
To which might be added, with propriety, 14 head-ache patients, and 8 with cough.	1—75, or, more properly, 1—97

* But I do not allow that the bark failed in this case, as it was not given liberally in the beginning of the illness, nor under my own directions.

PART IV.

OBSERVATIONS *on* DISEASES *on board the* BLENHEIM, *from January* 1, *to April* 7, 1783.

INTRODUCTION.

IN the ſame manner, without further preface, I ſhall lay before the reader, an epitome of our Obſervations on Fever on board the Blenheim, from 1ſt January to the 7th April, 1783; a ſecond-rate, whoſe complement was 767, beſides having a number of ſupernumeraries on board, about 800 in all. The ſhip was employed during that time at Spithead, St. Helens, and in the Channel.

CHAP.

CHAP. I.

MONTHLY REVIEW *of the* BLENHEIM'S SICK LIST, *from the 1ſt January to the 7th April*, 1783.

JANUARY.

HAVING only left the Romney yeſterday, and joined the Blenheim immediately, without any preface, I proceed to lay before the reader the ſtate of the Sick Liſt until ſhe was paid off on the 7th April.

113 complained of fever; 7 of pleuritis; 3 of quinſey; 1 of ophthalmia; 2 of rheumatiſm; 7 of cough; 2 of conſumption; 2 of ſcurvy; 2 of aſthma; 2 of eruption; 1 of deafneſs; 1 of hæmorrhoides; 1 of itch; 1 of ſcald; 1 of ſtrain; 14 of contuſion; 2 of diſlocation; 2 of excoriation; 2 of inflammation; 2 of furuncle; 1 of chilblains; 3 of abſceſs; 12 of ulcer; and 1 of cancer:—185 in all.

19 were ſent to the hoſpital, as we were going to ſail on foreign ſervice, viz. 11 for fever; 1 for conſumption; 1 for cancer; and 6 for ulcer; and the other conſumptive pa-

tient died. The fever patients were only ſtiled ſo, to get them received into the hoſpital; they were picked bad and dirty men.

Commodore Elliot's broad pendant was hoiſted on board, and the ſhip was commanded by Captain Lewes. The ſhip's complement was 767, including the Commodore and his retinue; beſides about 50 ſupernumeraries, who were raw and green new-raiſed men from Ireland; and, as is ever the caſe with new-raiſed men, they were exceedingly dirty and ſlothful.—16th. We ſailed, and anchored at St. Helens.

17th. PM we ſailed with the Triumph, Goliah, Pegaſe, Cambridge, and Proſelyte frigate, and Veſuvius fireſhip.

19th. We returned to St. Helens with the ſquadron, in obedience to orders ſent after us by expreſs.

FEBRUARY.

Only 35 complained of fever, a prodigious decreaſe; 1 of meaſles; 4 of ophthalmia; 2 of rheumatiſm; 3 of cough; 1 of aſthma; 2 of eruption; 1 of belly-ache; 1 of itch; 1 of mania; 1 of ſcald; 7 of contuſion; 2 of wound;

2 of

2 of inflammation; 2 of abſceſs; and 15 of ulcer:—80 in all. 5 of whom were ſent to the hoſpital; 1 for fever; 1 for conſumption; and 3 for ulcer.

6th. We ſailed, and anchored at Spithead.

7th. Commodore ſtruck his flag.

28th. The marines were landed.

MARCH *.

* I am ſorry part of my Journal is loſt, and that I cannot proceed with the Review further than the 19th of the month, until when only 9 complained of fever; 3 of cough; 1 of aſthma; 1 of ophthalmia; 1 of ſcald; 4 of contuſion; 1 of diſlocation; 1 of wound; 1 of inflammation; and 1 of ulcer.—In the beginning of the month we ſailed from Portſmouth to Plymouth: 7 were ſent to the hoſpital; 1 for conſumption, and 1 for ulcer, to Haſlar; 4 for fever, and 1 for fractured thigh, to the Royal Hoſpital at Plymouth.

CHAP. II.

STATE of His MAJESTY's Ship BLENHEIM's SICK LIST, from the 1st of January, until the 7th of April, 1783, and the Number sent to Hospitals.

DISEASES.	January	February	March	April	Numbers of Diseases	Deaths on board	Numbers sent to Hospitals.	Sent for Fever	Died of Fever at Hospitals.
Fever	113	35	9		157		16	16	
Measles		1			1				
Pleuritis	7				7				
Quinsey	3				3				
Rheumatism	2	2			4				
Scurvy	2				2				
Cough	7	3	3		13				
Asthma	2	1	1		4				
Consumption	2				2	1	3		
Belly-ache		1			1				
Mania		1			1				
Ophthalmia	1	4	1		6				
Deafness	1				1				
Hæmorrhoides	1				1				
Eruption	2				4				
Itch	1	1			2				
Scald	1	1	1		3				
Strain	1				1				
Contusion	14	7	4		25				
Dislocation	2				2				
Fracture			1		1		1		
Excoriation	2				2				
Wound		2	1		3				
Inflammation	2	2	1		5				
Furuncle	2				2				
Chilblains	1				1				
Abscess	3	2			5				
Ulcer	12	15	1		28		10		
Cancer	1				1		1		
Monthly Number of Diseases	185	80	25		288		31*		
Deaths on board						1			
Numbers sent to Hospitals	19	5	7	1 venereal			32		
Sent for Fever	11	1	4					16	
Event of Fever Cases at Hospitals.									

* One Venereal Patient was sent the Day the Ship was paid off.

CHAP. III.

REMARKS *on the* REVIEW *and* TABLE.

REMOVING from a healthy ſmall fourth-rate into a ſickly ſecond-rate, is a ſerious ſtep to officers in general, and more particularly to a Surgeon. If the ſhip is ordered on foreign ſervice, the former have time to diſcipline and exerciſe the men on the voyage, before they arrive at the place of their deſtination for active ſervice; but the Surgeon is immediately involved in actual difficulties and imminent danger of his life. Such was my ſituation on board of the Blenheim. I got infected in the ſick berth a few days after I went on board, and mentioned it to my firſt aſſiſtant at the time; but, by immediate care, was not laid up.

The ſupernumeraries were lately brought over in crowded tenders from Ireland; and for the reaſons ſtated in October, 1779*, they were conſequently infected, and carried the infection on board of every ſhip to which they were

* On board the Edgar.

ſent. So that it will be difficult to prove that this ſupply, from the manner in which, and period when, it was brought over, was of the leaſt benefit to the ſervice. On the contrary, I think it was a national hurt; for the ſhips being ſoon after paid off, before the infection was deſtroyed, it was diſperſed throughout the whole kingdom; and wherever fever appeared, which was almoſt univerſally in Great-Britain, it was called by every name that Surgeons, Apothecaries, or Phyſicians could think of, without ſuſpecting the ſource, which was every where the ſame, and every name of fever, expreſſed in the Lexicon, was applied to it. What contributed greatly to this general malady was, that, though Government was at the expence of providing tranſports to carry theſe volunteers back to Ireland, when they were paid off from the ſhips, vaſt numbers of them would not go home, but choſe rather to wander through the country, and carried diſeaſe with them wherever they went.

The uncommon attention which Captain Lewes, and the Firſt Lieutenant, Mr. John Laugharne, under his direction and ſupport, paid to the cleanlineſs and diſcipline of the

men and of the ſhip, redounds greatly to their honour. Every thing which I propoſed for the health of the men, and for ſtopping the progreſs of the infection, was immediately complied with. This attention of theirs, and the Commodore's benevolence to the ſick, greatly aſſiſted me under ſuch an arduous taſk; a taſk which I conſidered as one of the moſt trying, either for my ſafety, or medical knowledge, that could have preſented. That I had run a prodigious riſk of the former, I have before related; and the time was come, when, upon the moſt urgent neceſſity, an obvious and fair practical proof of the veracity of my doctrine, and the ſucceſs of my method of managing the ſick, was required. I was now to eſtabliſh it on the moſt ſolid and laſting baſis, or have it ſneered at for ever, and condemned as erroneous, as every former practical ſyſtem, that of two or three practitioners only excepted, has been or muſt be; and, thank God, I ſucceeded, and have eſtabliſhed it beyond the power of theory or ſophiſtry.

Our ſquadron was very ſickly, and buried a number of men, particularly the Triumph, while we lay at St. Helens.

As ſoon as poſſible after I felt myſelf infected, I took an emetic, and, after the operation, bark and a little wine. In the ſame manner my fever patients were vomited when they complained, and the bark was given them an hour after the operation; the pediluvium was uſed at night. Sudorifics and aperients, or other medicines, were joined along with the bark, as circumſtances required; and, by the ſame rule, the doſe and its repetition were regulated. Not one was let blood, nor debilitated by evacuations. Numbers of the fever patients were afflicted at firſt with catarrhous ſymptoms, in which caſes bark was not ſo early adminiſtered; but they were not debilitated by evacuations more than other fever patients: on the contrary, the moſt powerful ſtimulants were preſcribed. ℞ Cantharid. fort. gutt. v—x. ex ſemin. lin. infuſ. ℥ij. bis, ter, quaterve in die, ut viſum.

The ſucceſs of the practice is evident from the alteration of the Sick Liſt in February. Conſtant fires in pots were kept in the ſick berths, which were under each ſide of the forecaſtle; they were frequently paid with oil of tar, which was ſupplied from the dock-yard, and the lower and middle decks were

ſometimes paid with it. Vinegar is by no means to be compared with it for correcting effluvia or ſmell.

Every thing elſe, which I could think of, was put in practice to deſtroy the infection, and to keep the ſhip clean and healthy; the bedding of both healthy and ſick was regularly aired.

CHAP. IV.

TABLE.

Shews the Number of FEVER PATIENTS *on board of the* BLENHEIM *between the 1ſt January and the 7th April,* 1783; *and the Proportion of Deaths.*

Number of Fever Patients.	Died.
157	None.
Proportion of Deaths.	None died.

PART V.

Practical Observations on the prevailing Diseases in the Neighbourhood of Hythe, in Hampshire.

INTRODUCTION.

I SHALL in this Part lay before the Reader the Observations on Fever, which I have had an opportunity to make from the 7th of April 1783, until the 30th April 1789, in a country where Fever has been considered endemial. But it may be proper first to give some idea of the country; and in doing this, I have no intention to state parish registers respecting the increase or decrease of population, nor to draw comparisons between different places as to their being more or less healthy; nor is the reader to expect a pastoral or flowery description of the country, as I design only to shew the general situation and appearance of it, so far as it may be sup-

poſed to affect the health of the inhabitants.

During the time mentioned, I have reſided chiefly at Hythe, a village bordering on the New Foreſt; with Hampton Water bearing from about N b W to S E b S—the Sea and Iſle of Wight to the Southward. Beaulieu or Bucklerſhard Arm from about S W to W; and the New Foreſt, part of it between us and that arm, and part of it bearing almoſt from W to N b W round to Hampton Water; between which and Beaulieu Arm is about four miles; ſo that we live in an oblong nook, nearly ſurrounded with the ſea, and ſalt water marſhes along Hampton Water and Beaulieu Arm; and freſh water marſhes in the Foreſt, from about S W and W N W of us, at no great diſtance: but between theſe and Hythe, cloſe to it is high land, called Langdown, that ſhelters us greatly from the S W and W winds, which blow acroſs the freſh water or foreſt marſhes towards us. Over Langdown, the roads to Fawley, Leap, Gilbury, Beaulieu, Lymington, &c. lead; and the range of my practice in any direction from Hythe, does not exceed eleven miles in a ſtraight line.

Part V. South-

Southampton bears nearly N N E, diſtance about three miles on the oppoſite ſide of the water. At high water the tide comes cloſe to Hythe, and runs into it at ſpring tides. At low water, eſpecially during ſpring tides, a large tract of muddy marſh, extending the whole length of the Arm from Redbridge down to Calſhot Caſtle, covered in many places with ſea weeds and muſcles, is left uncovered, and ſmells, at times, diſagreeably, eſpecially during Eaſterly winds, to which we are greatly expoſed. It is chiefly foreſt land very marſhy, and in wet weather the road to Exbury, Gilbury, and Beaulieu is difficult. Good water is ſcarce, eſpecially in Hythe.

There is great variety in the face of the country round us. Numbers of hills, valleys, and champaign countries, which are covered with great variety of herbs, ſhrubs and trees: of the former, fern; of the middle, furze; and of the latter, oak are moſt abundant.—The champaign parts are chiefly to the SW. The ſoil in general is thin and light, covering either gravel, ſand, or whitiſh clay; beſides, in the foreſt marſhes there is a black peat ſoil. In dry weather, water is ſcarce every where here.

The

The country is yet but thinly inhabited for, excepting in a very few villages, Beaulieu, Fawley, Hardley, Langly, and Dibden, two houſes are ſeldom to be met with together. We have little connection with Lymington, Marſhwood, Eling, Totten and Lyndhurſt.

The neareſt village to us is Dibden, about two miles higher up the Arm than Hythe, conſiſting of a few ſcattered houſes and detached farms, forming a very ſmall pariſh. From the parſonage, which is ſituated on an eminence, there is a fine proſpect of Southampton, the country round it, and the Arm or water. Marſhwood, lying ſtill higher up the water, low in ſituation, and very wet in the winter, is a very large ſtraggling village in the pariſh of Eling, about two miles higher up the water, and is parted from Totten, near the head of the water on the ſame ſide, by a ſmall arm of the tide, whereon is a corn mill. The neareſt village to us on the South is Hardley, about half way to Fawley, which, though lying high to what Hythe does, has formerly been ſo ſickly as to give name to fever here, called the Fawley Ague, or cold chills and fever, which generally ſpeaking is of the remittent type;

a real ague or intermittent very ſeldom occurring.

Beaulieu bears S W of us, and is partly in a bottom, and partly on either aſcent from the arm which runs up through it; and at low water leaves a large extent of muddy marſh on both ſides. Upon this arm is Bucklerſhard, where line of battle ſhips are built for Government in a private builder's yard. At the entrance of the Arm on the N E ſide is Leap, a ſcattering village, with a freſh as well as ſalt water marſh, cloſe to ſome of the houſes. This village is about eight miles from us.

Somewhat nearer to us, near to Bucklerſhard Arm, is Exbury, another very ſcattering village ſurrounded with wood, chiefly oak; and in like manner is Gilbury, cloſely adjoining, which conſiſts only of the Lord of the Manor Colonel Mitford's manſion; a ſmall chapel of eaſe; a few detached farmhouſes, and ſome cottages here and there. The ſituation of the manſion is extremely rural and pleaſant in the Summer, and commands a view of Bucklerſhard and the Iſle of Wight. The only other place deſerving the name of village near us, is Langly, about five miles in land from Hythe. Cloſe to the ſea ſide, almoſt oppoſite to Cowes, is a build-

ing belonging to T. Luttrell, Eſq. called Eagle Hurſt, where Lord Cavan reſides in the Summer with his family; bearing about S of Hythe, in a fine open airy ſituation. Cadland, the ſeat of Robert Drummond, Eſq. about three miles and a half from Hythe, and one from Fawley, nearly half way between Hythe and Calſhot Caſtle, with a beautiful farm and fine garden adjoining. The houſe ſtands high on a dry gravel foundation, in an extenſive park, about half a mile from the neareſt part of the ſea at high water, and from the marſh at low water. But a great part of the marſh has been banked up from the Sea, between Cadland and Calſhot Caſtle, and makes a very extenſive rich meadow; and there are ſeveral ſalt works on the marſh. The park is large, and diverſified with woods and lawns, without any ſtagnant water, excepting a clean pond, whereon is an engine to ſupply the houſe with water; and it is alſo ſupplied with ſpring water. The ſituation of Cadland is healthy and pleaſant; commanding an extenſive proſpect. There are a number of places beſides, but they are ſo ſmall as not to deſerve the names of villages, Hardley excepted. Every houſe or farm in the country, except in thoſe villages, has a name.

In Hythe, notwithſtanding it is ſo low in ſituation, cloſe to a ſea mud marſh at low water, I have not met with many fever caſes. In Dibden I have met with infection in two houſes, a pauper's and a ſawyer's, as virulent as I ever obſerved in a ſhip or hoſpital. The pauper's whole family, conſiſting of himſelf, his wife, and ſix children, were infected. The oldeſt, a girl, died. They got the infection from their neighbour, the ſawyer, whoſe mother and ſiſter-in-law being ill and dying of it in Beaulieu, had it brought into his family by his wife going to ſee her mother and ſiſter. The pauper's wife's mother, who lived at Marſhwood, by coming to ſee her daughter's family, caught the fever and died. Several of the reſt of the pauper's family eſcaped with great difficulty. All the ſawyer's family were infected, except the wife. One child, who was too young to be prevailed on to take medicine, died. Of fourteen who I could learn had this fever, five died.

But this was accidental ſickneſs, and not endemial; for when fever occurs, and is properly managed at firſt, it ſeldom acquires ſuch virulence any where; and the nearer the ſituation is to marſhes or undrained ſwamps, the

worſe

worſe the fever is, and the patients recover health with more difficulty.

In every part of the country, I have met with bad caſes of fever. In Minſtead, about two miles higher up in the foreſt than Lyndhurſt, I viſited a farmer who had been infected at the work-houſe by a pauper and his family, who were ſent home to their own pariſh from a pariſh in Somerſet very ill of fever; ſome of them in filthy rags, and ſome of them almoſt naked. The Overſeers of the poor in Minſtead, not being able to prevail on any perſon to look after them, were obliged to do it themſelves; and my patient being one, and a humane man, was infected: as were many of the inhabitants from going out of curioſity to ſee them when they firſt came, and a conſiderable number died; but my patient happily recovered. The pauper died.

The diet of the lower claſs of people here, is neither adapted to preſerve health, nor to recover it when loſt. It conſiſts of a ſcanty proportion of bread, potatoes, cheeſe and bacon, with ſome vegetables and a little milk in the ſummer. Their drink is chiefly water; ſometimes they have a little ſmall beer, but more frequently a little ſpirit, which grows

ſcarcer daily ſince ſmuggling was ſo well looked after. Probably fever among them, formerly, was often occaſioned by the immoderate uſe of ſpirits—Laſt year they had a little poor cyder. Small beer would be more plenty amongſt them, were it not for the high duty on malt. This claſs, in general, is extremely naſty in their houſes, perſons, and apparel; their countenances are ſallow and ſqualid; they are addicted to indolence, and their children are indulged in paying too little regard to the ſabbath; not but there are exceptions in all theſe reſpects.

Cold chills and fever, as they expreſs themſelves, are common amongſt children, even thoſe on the breaſt. They treat this appearance of fever with great indifference, and ſuffer it to continue upon them for many months. Such children always have leſs or more obſtruction, ſwelling and hardneſs in their bowels: even ſome of the better ſort of farmers will ſuffer this appearance of fever to hang about their children for many months, without calling in proper aſſiſtance; becauſe they ſay there is no cure for it, and it will cure itſelf.

CHAP.

CHAP. I.

Observations *on* Fever, *&c. in* 1783.

WHEN I arrived at Hythe, in the beginning of April, the ſmall-pox were pretty general. I was informed they were at firſt epidemic in Southampton, and, ſo unfavourable were they, that ſeveral had died of inoculation. My patients, about fifty in number, all did well. I had great difficulty to ſave a young man, about 18 years of age, at Leap, who was infected at Southampton, where he had gone to a fair, and got drunk, I was told. I treated him from the beginning as a fever patient: it was the 1ſt July when he complained to me. The Summer was remarkably dry and hot; and we ſeldom had any rain, and but little when it did rain, with a good deal of thunder and lightning. Our harveſt began the 26th July. Chriſtmas introduced the Winter, and until then the weather was generally uncommonly fine. Green peas were picked here in the middle of November.

Fever was the moſt prevalent diſeaſe until the 10th Auguſt, when rain brought the wind to the N. and a ſudden change of weather, from very hot to cold, immediately introduced bilious affections of the bowels, which were very general, but they were chiefly mild.

From the 23d April until the 31ſt December, 1783, I had 67 fever patients under my care, of whom two died about the ſecond day after I was called in, and neither of them took bark;—they were ſo bad, that they ſcarcely took any thing. The one a woman, aged about 45, in Newtown, about three miles from Hythe; and the other a ſailor, belonging to a ſmall coaſting veſſel in Leap, aged about 20. He caught the fever at Portſmouth.

Thirty-four complained in the months of Auguſt, September and October, of fever, of both ſexes, from the infant to old age. Five only complained in November, and none in December.

I have, in another place, given my opinion of the cauſe of fever being ſo epidemic this year.

CHAP. II.

Observations *on* Fever, *&c. in* 1784.

THE winter was very ſevere. The froſt continued, and the ſnow, as I was informed, lay on the ground much longer than uſual in this country. The ſnow fell with a gale of wind from the N. E. and drifted exceedingly. The ſpring was rather cold and backward; but the ſummer was pleaſant, and the hay harveſt fine. About the 18th Auguſt, rain ſet in, after which there was ſcarce one dry day during the month. September was dry and pleaſant until the 19th, when it rained, and there were ſhowers for three days after; but, upon the whole, the weather was fine until the 8th December, when a good deal of ſnow fell, and on the 9th. It alſo ſnowed the 11th, 16th, 17th, 18th, and 21ſt. The wind between N. and N. E. brought the ſnow, and it got to the Southward of E. about the 27th. It was a very cold month.

This year I had only 43 fever patients, of whom four died. One a young man, aged

about 22 years, in February, at Stone near Leap, who was ill three weeks before I ſaw him. He took a good deal of bark, but was too late in beginning with it. A boy at Beaulieu in March, who was ill ſome time before I ſaw him, and did then not take medicines regularly. One V. aged about 34, at Gilbury, was ſpeechleſs, in a violent paroxyſm, when I was called in; but in a ſhort time had a perfect remiſſion from the medicine which I ſaw adminiſtered; and though I gave the moſt particular directions to repeat it during the remiſſion, it was neglected; ſo that the favourable opportunity to recover him was loſt, and he died the next paroxyſm. The other was a woman, whom I only ſaw twice in the end of December. She died in the beginning of January, 1785, and had been four or five days ill before I ſaw her; ſhe was aged, and much debilitated: ſhe took very little nouriſhment or medicine.

Belly-ache and bowel complaints in the autumn were extremely epidemic, and fatal in many places. Enteritis appeared about the end of September, and continued to rage with violence until after the froſt ſet in ſome time.

But, fortunately, no patient which I attended died. The antiphlogiſtic plan was rigidly followed. Several patients were let blood fourteen times before they recovered: they were always relieved during the operation. The ſemicupium alſo relieved immediately in every caſe in which it was uſed. After repeated evacuations, opiates were beneficial. One patient was recovered beyond expectation by extr. hyoſcyam. gr. i—ij. repeated every ſix hours. The purgatives which I made uſe of were chiefly ol. ricin. manna and neutral ſalts. Blood taken from them during the hard froſt, and placed in a cold room, without fire, never aſſumed the inflammatory cruſt or buff, though it flowed in a ſtream from the patient.

Fever, as I believe it ever has done, and will do in all ages, aſſumed appearances according to the conſtitution of, and circumſtances about, the patients; accompanied with acute rheumatic pains in ſome caſes, which an unwary practitioner might have taken for pleuritis or cauſus. In other caſes it was attended with bilious or icteric ſymptoms; and in others there were obvious marks of great debility about the patients: but in all of them

the bark, joined with aperients when neceſſary, performed the cure. In June and October 15 of the 43 fever patients complained, and none in December.

CHAP. III.

OBSERVATIONS *on* FEVER, *&c. in* 1785.

THIS was the longeſt winter I remember, and it was ſevere. A great deal of ſnow fell, and it lay on the ground much longer than uſual in this country, I am told. The ſpring was very cold and backward, the froſt continuing until the beginning of April, and then white froſt almoſt every morning of the month, and frequently in May. Until the 9th June, the thermometer was not higher than 53. June was dry, a few days in the beginning of the month excepted, when light ſhowers fell. But we had very little rain until the middle of July, after which we had rain ten days ſucceſſively; and it continued wet, and was very cold the greateſt part of Auguſt; notwithſtanding which, many got in their

harveſt before the end of the month. The beginning of September was alſo very cold and wet. The end of October and beginning of November were rainy, and froſt ſet in the 7th, which continued ten days; and rain again in the end of the month. The wet weather continued until 21ſt December, when froſt again ſet in, and ſnow fell the 25th.

After ſo long and ſevere a winter, ſo cold and backward a ſpring, and ſuch a wet unſeaſonable ſummer, that it was a very ſickly year is not to be wondered at. March, July, October, and November were particularly ſo; thirty-eight of the ſixty fever patients which were under my care this year, having complained in thoſe months. Seven of the 60 died, beſides the elderly woman who complained laſt December, already made mention of. Two of the ſeven died in March; one of them an old and very infirm blind man, worn out by repeated attacks of fever from improper living, at New-Farm, near to Leap. The other a child in Fawley; in whoſe caſe I foretold the fatal event at firſt ſeeing it. The former was too late in beginning to take medicine, and the latter would not take any.

One died in September at Leap, who obſtinately refuſed taking medicine:—her huſband was ill at the ſame time, and recovered with much difficulty; both were very obſtinate, and were too long ill before they ſent for me.

Two children in October, at Dibden, of infection, as already obſerved; they took very little medicine.—One woman in November, who lived cloſe to a large marſh, and was ill long before I ſaw her: indeed her caſe was rather chronic than fever.—And a young woman in Beaulieu pariſh, in December, with putrid ſore throat. She was ill five days before I was called in. The bark had no trial in thoſe caſes.

The fever began with, and continued throughout the year; and, I was informed, was very fatal in many places; but I did not find, in many very bad caſes, that it reſiſted my uſual method of treatment, where I was called in early, and the patients followed directions. Moſt of thoſe were accompanied with bilious obſtructions or ſuffuſion and icteric ſymptoms; conſequently aperients were joined with bark.

In many convaleſcent caſes of fever, I have obſerved that, after the fever and its concomitant ſymptoms were entirely carried off, great acceleration of the pulſe and reſtleſs nights have again returned, while the loſs of appetite, and anxiety, continued; all of which were only effects of great debility, and diſappeared as the patients regained ſtrength, with the aſſiſtance of frequent change of apparel and air, nouriſhing diet, wine, anodynes, moderate exerciſe and amuſement.

Enteritis appeared ſo early as July, was extremely epidemic, and fatal in ſeveral inſtances in the country, and in Southampton, as I was informed; though, fortunately, I did not loſe a patient. Numbers who had it laſt year, ſuffered greatly from it this year; but the ſame method of treatment which ſucceeded before, was equally ſucceſsful now.—It deſerves notice, that enteritis was never known to be epidemic here before laſt year, as I was informed.

I had two patients, boys, bitten by mad dogs *. One boy, aged about 13 years, on

* One of the dogs died mad: the other dog, which was bit by the mad dog, was ſhot after ſigns of madneſs appeared about him.

the 10th April, had both his legs *rather torn than* bitten by the dog, which died mad, after having bitten numbers of dogs and hogs, which died, or were deſtroyed. I did not ſee him before the 13th April; until then he had been dreſſed (by his miſtreſs, a reſpectable farmer's wife) with poultices made of oatmeal and grounds of beer. He was now ſent home to his father's at Fawley. The lacerated wounds in both legs (fifteen large and ſmall) were very foul, black, and almoſt painleſs, though the legs were alſo much ſwelled.

I dreſſed them twice a-day with Barton's Ormſkirk medicine regularly 22 days, one afternoon excepted; and once every day after, until he was well, excepting one day. June 1ſt, he was ſo well, that I did not dreſs him afterwards.

On the 13th, 17th, 21ſt, 29th, and 30th April, I gave him a doſe of Barton's Ormſkirk medicine. It was repeated the 30th, becauſe he waſted part of his doſe the day before. On the 30th, P M, he had a ſtool from his medicine, which was the only time that it had any obvious effect, unleſs profuſe ſweating of his feet (which was obſerved by his mother in

law during the cure) could be attributed to it. On the 13th April, the pulſe was 86, and gradually diminiſhed to its natural ſtandard. The wounds looked obviouſly better after every doſe of the medicine which he took.

On the 17th, the wounds in the right leg (four in number) were bloody and inflamed, A M, after being diſpoſed to bleed the preceding day from the ſlighteſt touch.

The 22d, I obſerved he drivelled; but his mother in law ſaid he commonly did; but never had obſerved his feet to ſweat before. No other occurrence happened worthy notice during the cure.

He lived with me from 1ſt June to the 11th October, as a ſervant, and never ſhewed any ſymptoms of illneſs.

The other boy, aged about 10, was bit the 31ſt May, by a large dog, which fought with the mad dog, and was ſhot, after ſhewing ſigns of madneſs. The boy and his brother, as they went to ſchool, were accuſtomed to play with the dog which bit him, and he never had been ſurly to them before. He was bit in his right arm. I found a ſmall wound in the anterior part of the fore-arm, and a ſlight ſcratch on the anterior part of the

arm, above the joint, which ſeemed both to have been made at one bite. The arm, eſpecially about the joint, was inflamed when I firſt ſaw him on the 2d June; he complained of great pain, eſpecially about the tendinous expanſion of the biceps, and ſaid he had paſſed a very reſtleſs night from the pain. He had a ſmart fever on him; and told me that as he went to ſchool after he was bit, a perſon, to whom he ſhewed the bite, officiouſly poured ſomething on the wounds *to take the anguiſh out, as they pretended*, which I afterwards learned was ol. terebinth.

I dreſſed his arm with, and immediately gave him a doſe of, Hill and Berry's Ormſkirk medicine, A M, which he immediately *vomited*, the pulſe then beating 98. I therefore repeated the doſe in the afternoon, though the fever ſtill continued. The 3d June, I found him eaſy, and that a little ſuppuration had taken place, after a much better night. He had ſtill a little fever.

4th. He was free of fever, and the ſwelling and hardneſs were much leſs.

5th. I gave him a full doſe of Hill's medicine again, and no unfavourable ſymptom ever appeared after; and on the 6th he went to ſchool

ſchool in ſpite of his mother's directions, and never had any complaint afterwards.

FIRST REMARK.

I ſhall leave it to the reader to make his own obſervations on theſe caſes, which merit his attention, becauſe they were both cured by medicines, which, though apparently of exactly the ſame nature, are the property of rivals at great variance with each other; and, were I called to decide on the merit of both, I could not poſſibly give a preference to either, their effects appearing to me to be ſo perfectly ſimilar. Provided, therefore, that the medicine which is given be often enough repeated, it is of no conſequence which of them it is, in my opinion; but the repetition of it ought to depend on the judgment of a Phyſician or Surgeon; for the caſe muſt be extremely ſlight indeed, wherein I would depend upon one doſe.

SECOND REMARK.

If I had a patient bit about the trunk of the body, or head, I would ſee the medicine repeated every day, until there were obvious ſymptoms of recovery, and I would admini-

ſter the firſt doſe as early after the accident as poſſible.

THIRD REMARK.

The preceding caſes merit the reader's ſerious attention for another important reaſon, viz. "Popular opinion or confidence in this "or any other medicine, could not poſſibly "have any influence on either of my young "patients," whatever it might have on the parents, or on me who preſcribed it.

I am well informed, that a very eminent ſurgeon imputes *the ſuppoſed efficacy of the Ormſkirk medicine to credulity or popular opinion*; and has declared as his opinion, *that the Ormſkirk medicine never was of any ſervice in a caſe of canine madneſs*, i. e. That it never performed a cure upon a patient who had been infected with canine virus, or the poiſon of a mad-dog; and as ſuch an imputation and declaration may lead to important conſequences, I ſhall, without any intention to diſpute with him, offer ſome remarks, and leave it to the reader to decide.

As there are unfortunately facts beyond the power of man to demonſtrate, ſo there

are

are falſehoods or falſe opinions beyond the reach of demonſtration to confute. So that, whichever of thoſe propoſitions one chooſes to adopt, he can ſet demonſtration at defiance. Such is the opinion of this eminent man.

His *imputation* is, I truſt, clearly refuted to the reader's ſatisfaction in the third remark. Faith in a medicine may ſometimes do wonders, and even cure the patient; but ſo powerful an exerciſe of the mind as to produce ſuch an effect on a boy of thirteen, I believe never was known, and much leſs on one of ten.

If having given the Ormſkirk medicine ſucceſsfully in the only two caſes which ever came under my care—to two boys, on whoſe minds popular credulity or faith in any medicine, I preſume, could have no influence— be to him no proof of the efficacy of the medicine; his having given it unſucceſsfully to ſeveral patients does not prove to me its want of efficacy; becauſe, were his caſes fairly ſtated, I might poſſibly have great reaſon to diſapprove of his management. Having, perhaps, neither given the medicine early enough after the accidents, nor in ſufficient

doſes; nor repeated it often enough; nor treated the wound properly to render the medicine effectual; and his want of ſucceſs affords grounds for ſuch a ſuſpicion.

The field for argument on this, like moſt other ſubjects, not reducible to demonſtration, is boundleſs; and, although I have no inclination to diſpute, I cannot ſilently let the opinion of ſo great a man paſs unnoticed, when, very contrary, I am perſuaded, to his intention, it would otherwiſe claſh with the intereſt of mankind. In order, therefore, to elucidate the ſubject, let us try what aſſiſtance analogy will lend us, and this we look for in the ſmall-pox.

1ſt. The benefit derived to mankind from inoculation, is univerſally allowed: But is this benefit derived merely from the inciſion, and the inſertion of the variolous matter?

2d. Is it not derived from the uſe of proper means to render the diſeaſe mild and benign?

3d. For a certain time after inoculation, who can prove immediately that the patient is infected?

4th. Becauſe no poſitive proof can for a

certain time be adduced that the patient is infected, are the means to render the diſeaſe mild and benign to be neglected?

5th. Therefore, when we know that a wound is made with a poiſoned inſtrument, whether lancet or tooth, would it be wiſe or proper to delay in the one caſe longer than in the other, to uſe every method in our power, particularly the moſt approved by experience, to render the diſeaſe mild and benign; ſeeing the latter is invariably fatal when the patient is infected, and the diſeaſe is left to itſelf until it arrives at a certain ſtate, as in canine madneſs?

6th. In the practice of inoculation then, if we expect any advantage from it, are we not to uſe all the means in our power, as ſoon as inoculation has taken place, and often long before it, to guard againſt the deſtruction which the diſeaſe made in the natural way; and are not the ſame precautions to be uſed with a patient bit by a mad dog?

7th. In the natural ſmall-pox, and in fever too, if proper means have been neglected before, or at, the commencement of the diſeaſe, is not the loſs irretrievable, and the conſe-

quence often fatal. Is it, therefore, unreaſonable to expect the ſame to happen after the bite of a mad dog?

Beſides, the proprietors of the Ormſkirk medicine very properly recommend it to be given as ſoon after the accident happens as poſſible; though they adduce caſes wherein it was ſucceſsful after ſymptoms of madneſs came on, a number of days after the accident.

In a word, as there are juſt grounds to ſuſpect that infection has taken place after the bite of a mad dog, as well as after inoculation; as the effects of both may be rendered innocent by the uſe of proper means timely adminiſtered; as the Ormſkirk medicine is the moſt approved for the bite of a mad dog of any medicine we know; and as the ſucceſs thereof chiefly depends on adminiſtering it early after the accident; there is no opinion which, I think, would juſtify me in delaying a moment longer than I could poſſibly help to adminiſter it.

I will, therefore, only remark further, that I cannot foreſee any good purpoſe that the declaration of this eminent Surgeon's opinion could anſwer; but I fear that, very contrary

to his intention, I believe, it might have done great miſchief, had it been ſuffered to paſs unnoticed. So many unfortunate people having been bit by mad dogs, and done well from taking the Ormſkirk medicine, has ſo deſervedly placed it high in the public faith as a cure for canine madneſs, that any attempt to deſtroy this faith, without communicating a ſubſtitute more to be depended upon than this Ormſkirk medicine, is, in my humble opinion, neither philoſophical nor juſtifiable.

CHAP IV.

OBSERVATIONS *on* FEVER *in* 1786.

MY intention to go to ſea on board the Saliſbury, obliged me to leave home, and my buſineſs, ſeveral times before I ſailed, June 18th, for Newfoundland, by which means I had but twelve fever patients before that period. A woman, one of laſt December's fever patients, rather paſt middle age, who had been ill of enteritis in the autumns of 1784 and 85, and frequently ſeized with

ſlight attacks in her ſtomach and bowels between thoſe periods, died in January. Unfortunately ſhe became negligent of herſelf whenever ſhe arrived at a convaleſcent ſtate. Another woman died in March, the day after I was called in. I immediately foretold her death, and ſhe took no medicine.

After my return from Newfoundland in November, I had two more fever patients this year. I was then informed, that bowel and bilious complaints had been common in the autumn and fall, though they had neither been ſo general nor violent, even among thoſe who had been afflicted with them both the preceding years, as they were in 1784 and 85.

CHAP. V.

OBSERVATIONS *on* FEVER *in* 1787.

FOR the reaſons mentioned in the preceding chapter, I had but twelve fever patients before the middle of June, when I ſailed on board the Saliſbury again for New-

foundland, and only one more after we returned, the 18th November, until the end of the year. Moſt of thoſe eleven caſes were very bad, and they had been ſo a conſiderable time before I was called in. On my return I was informed, that bowel complaints had been frequent in the autumn, eſpecially among thoſe who had been afflicted with them the three preceding years.

CHAP. VI.

OBSERVATIONS *on* FEVER, *&c.* 1788, *and continued until the* 30*th April,* 1789.

UNTIL the end of June, when I ſailed again on board the Saliſbury for Newfoundland, I had only ten fever patients, four of whom were very bad; one of them a lady, who had been ill nine weeks before, under another Phyſician's care, and relapſed the firſt day ſhe went out to take an airing, and I was called in the next day. Both attacks of her illneſs commenced with violent pain and obſtruction in her bowels. She ſoon recovered.

After the 9th November, when we returned, until the end of the year, I had only three more fever patients, who recovered in a ſhort time.

In the month of January, 1789, I had ſix fever patients, five o whom were very ill, and one of them died, a woman, who I have been ſince informed lived intemperately. She was ill upwards of forty-eight hours before I ſaw her, and ſhe died the ſeventh day of her illneſs. I only ſaw her three times, though ſhe lived in Fawley. Her ſenſes were unuſually acute.

In February I had ten patients, one of whom, an elderly man, died the 8th of his fever; but he had been ailing ſeveral days before. I did not ſee him until the 4th day, and but twice afterwards, though he lived in Newtown. At firſt he was over anxious to get well, and afterwards deſpaired unreaſonably. His eyes ſeemed moſt diſeaſed.

In March I had but two patients, both old people; and in April only ſix, of which one died the fifth of his illneſs, and I did not ſee him until the beginning of the fourth day, when I immediately predicted his death.

CHAP. VII.

Observations *on the* Treatment *of* Fever Patients *on Shore.*

EXcepting in thoſe caſes accompanied with bowel complaints, bilious ſymptoms, or rheumatic pains, wherein purging medicines were joined with the bark, I never deviated from my uſual method of treatment; and in one caſe, accompanied with profound coma, in which I gave muſk frequently in ſubſtance, as a ſtimulant, in doſes of ten grains, beſides the julep—ineffectually.

CHAP. VIII.

TABLE.

Shews the Number of my FEVER PATIENTS *every Year from the 7th April, 1783, until the 30th April, 1789,* on Shore; *the Number of Deaths; and the Proportion of Deaths.*

Years.	Number of Fever Patients.	Deaths.	Proportion of Deaths.
1783	67	2	1—33 near.
1784	43	4	1—10 near.
1785	60	7	1—9 and upwards.
1786	12	2	1—6
1787	12		
1788	10		
1789	24	3	1—8
	228	18	1—14 nearly.

CHAP. IX.

REMARKS *on the* OBSERVATIONS ON SHORE, *and on the preceding* TABLE.

IF the event of my ſhore practice in fever, had been the real conſequence of my management of it, there would have been very little to ſay in its behalf, and much leſs to boaſt of ſucceſs. But the reverſe is the real

fact; and I have been extremely particular in my ſtatement, for the public good, and not from any ſelf-intereſted motive, as will be readily granted me. Very little credit can poſſibly be derived from it, were I ever ſo ſolicitous for it. But nothing ought to ſtand in competition with the public good and truth.

After what I have already ſaid, it is almoſt needleſs to explain to the reader the cauſe of my ſhore practice having been ſo unſucceſsful. Of the eighteen deaths, one patient only had a chance given her to recover; but her conſtitution was ſo worn out with repeated attacks of enteritis, for two years, that medicine could not recover her, though I ſaw her from the moment ſhe was ſeized with her fever. This was the caſe of profound coma, wherein muſk was given. Other ſtimuli were alſo adminiſtered in this caſe ineffectually, as well as the bark and wine. Two more of the eighteen took bark; but they were ſo long ill before I was called in, that it had not a fair trial by any means. In moſt of the other caſes, it was idle to expect medicine to relieve them—they were ſo near the fatal period before I was called in. One patient I thought might have recovered, though I did

I did not ſee her until ſhe had been ill ſeveral days, had ſhe not been ſo obſtinate as to refuſe her medicine. The unſucceſsfulneſs of this practice originated from my not having been called in ſooner, and the obſtinate diſpoſition of the lower claſs of my patients; and when compared with the ſucceſs of my practice on board of different ſhips, it holds out a very melancholy and important leſſon to the community—to call in medical aſſiſtance, eſpecially in fever, ſo early as to profit thereby; and not to delay until the phyſician, when he comes, can do no more than witneſs the patient's death, or tell the relations that there are no hopes of recovery.

I have always conſidered it as a vaſt advantage, which we enjoy in medical practice in the navy, that we are conſulted ſo early in fever; that we ſee our patients ſo often; and that we have authority over them and their attendants, generally ſpeaking. Indeed the patients themſelves and the empire ſhare in the advantage; and it confirms what I have already ſaid, that "the ſooner and more liberally bark is given in fever, the more effectual it will be."

PART

PART VI.

OBSERVATIONS *on* FEVER *on board His Majesty's Ship* SALISBURY, *from the 8th March 1786, until the 28th November* 1788.

INTRODUCTION.

ON a voyage to Newfoundland in time of Peace, ſo little occurs worth mentioning, that it would only be ſwelling the volume, and taking up the reader's time to inſert a Monthly Review. And if our people had been ever ſo ſickly, both the voyage and the iſland are ſo well known, that a review would have been unneceſſary on thoſe accounts. For the ſame reaſon I forbear inſerting a review for the time the ſhip is at home, while employed on that ſervice, which is ſeven months of the year; and the time of the paſſages out and home, and of the ſhip being at Newfoundland, is five months, without any material difference year after year: during our ſtation, at leaſt, it was ſo. Without further preface, therefore, I ſhall lay before the reader a ſuccinct account of my Obſervations on Fever annually.

CHAP.

CHAP. I.

Observations *on* Fever *in* 1786.

THE ſhip was commiſſioned the 1ſt of March at Portſmouth; and but few caſes of fever occurred before our ſailing the 18th of June; or upon the paſſage, until we got upon the Banks, when more complained and the meaſles appeared, which I am informed is not uncommon; and but few were ſeized with fever, while the ſhip lay at St. John's, where we arrived the 19th of July, and ſailed the 25th of October for England. Upon the paſſage home we had alſo but few fever patients. We arrived at Spithead the 21ſt November.

When we arrived at St. John's, and while we lay there, the ſick were ſent on ſhore to the hoſpital. The treatment of fever patients there, being immediately under my own direction, was exactly the ſame as on board, reſpecting medicines.

From the 8th of March, the day of my appointment, until the 31ſt December, were

31 fever patients, beſides being ill myſelf, all of whom recovered.

The inhabitants of St. John's were in general healthy this ſummer; there being but very few fever caſes, which I could hear of. A ſhort time before we ſailed, a ſeaman was ſent to the hoſpital very ill of fever, who applied to the Commodore for relief, as he had been ſent on ſhore by the maſter of a merchant ſhip, to which he belonged, becauſe he was ſick, which is a cuſtom there on board of merchant men, by which means many a valuable life is loſt to the public; as probably would have been the caſe with this man, had not the Commodore ordered him to be entered on board the Saliſbury, and to be ſent to the hoſpital. And I have only mentioned this man, becauſe it furniſhes me with an opportunity to lament, that no proviſion is made at a place of ſo great trade and conſequence as St. John's is, by the merchants and traders, for the many helpleſs objects of diſtreſs, who are often ſent on ſhore from their veſſels with virulent infection about them, where they frequently periſh for want of food, as well as medical aſſiſtance. Their own intereſt, I mean the merchants and traders, as well as

the great cauſe of humanity, plead for an aſylum being provided for thoſe objects. The miſerable agreement between the ſurgeons of the place and the fiſhermen, for *doctoring*, as they call it, cannot poſſibly entitle them to more care or medicines when they are ſick, than the charitable diſpoſition of gentlemen in narrow circumſtances, as numbers of the ſurgeons there are, prompts them to beſtow: and moſt of the ſeamen on board of the veſſels have no agreement at all; but are ſent on ſhore when they are taken ill to ſhift for themſelves, where every thing is very dear: and in a ſhort time they become beggars, if they are fortunate enough to ſurvive their illneſs, for the veſſels to which they belonged are ſailed on their voyage.

On the 2d Auguſt, a fire broke out in the woods on the South ſide of the harbour, on the road to Petty Harbour, which was got under and almoſt put out the 8th. In ſome parts it continued to ſmoke for ſome time. The Commodore went over and ſtaid ſome days with our ſhip's company and officers, and the officers and troops of the garriſon, to put it out. Some inhabitants aſſiſted.

When we arrived the 21ſt of November at

Spithead, after a bad paſſage, we had only rheumatic, ſcorbutic, and lame people on the ſick liſt.

When I was ill myſelf, I took the bark freely with purgatives—bowel complaints being the moſt urgent ſymptom, and tinct. Thebaic. occaſionally.

CHAP. II.

OBSERVATIONS *on board the* SALISBURY 1787.

WE ſailed again from Spithead the 13th June, in company with the Winchelſea; and with one fever and one flux patient—9 in all on the ſick liſt. After a very indifferent paſſage, in very foggy weather, and the wind dying away, we heard the ſurf beating on the ſhore the 14th July, and anchored. When it cleared, we found we were off the Bay of Bulls, and the next day we got ſafe into St. John's. The ſick were ſent on ſhore to quarters, becauſe the hoſpital was ordered to be pulled down, which was done accordingly.

On the 31ſt October we ſailed in company with the Roſe for England, and arrived the 20th November at Spithead, and not a fever patient on the liſt. In firing the ſalute on our arrival, one of the gunners loſt his hand, by loading a gun without ſpunging after it was fired.

In the months of January, February, March, April and May, a number of fever caſes occurred, and were cured on board; but unfortunately I have miſlaid the Diary for that time, which was kept by my firſt aſſiſtant: he was my firſt on board the Blenheim, and treated them exactly as I had directed him on board of that ſhip. However, I have an account of 64 fever patients who complained, and all recovered this year; 31 of whom complained in the months of June and July. Moſt of the young gentlemen were ill, and ſome of them were ill of fever ſeveral times. One of them, in whoſe caſe diabetes was the moſt diſtreſſing ſymptom, was extremely bad. I was then, and am ſtill of opinion, that they were infected by the gunner, who was very ill, from his ſloth and irregular manner of living, and really appeared to be a maſs of infection.

In the latter part of the ſummer, a number of the lower claſs of inhabitants died, chiefly of fever, as far as I could learn.

One of our men died at ſick quarters of mortification of his bowels. Upon opening the body, I found the liver greatly inflamed and enlarged; and the right lobe of the lungs much inflamed, and adhering ſtrongly to the pleura; beſides a mortification of the ſmall inteſtines near the commencement of the colon. One of the Echo's people died at ſick quarters of phthiſis pulmonalis. Upon opening the body, the lungs appeared to be only a maſs of enlarged tubercles in a ſtate of ſuppuration, and in many places adhering ſo cloſely to the pleura and ribs, as to be inſeparable without tearing ſome of them.

CHAP. III.

OBSERVATIONS *on board the* SALISBURY, *&c.* 1788.

BEFORE the 28th June, when we ſailed, a number complained of fever, and ſeveral were ſent to the hoſpital. There were ſix on the liſt the 28th June; three of them were fever patients, and one pleuritic. The firſt fortnight of the paſſage was chiefly blowing wet weather, and it continued to be wet until 17th July; the latter part was very moderate and pleaſant weather, and we anchored the 25th July in the narrows of St. John's harbour. On the 13th of July, one of the ſhips company died of cynanche trachealis, who was taken ill the 3d. In warping the ſhip to her moorings, ſeveral men were hurt at the capſtan, of whom one was ſent with concuſſion of the brain to ſick quarters; and 14 ſick and lame on the 30th. The 19th Auguſt, one of the young gentlemen ſhot off his left hand, which was amputated above the carpus.

The lower claſs of inhabitants were very ſickly all the Spring and Summer, and many died of fever. What contributed greatly towards their ſickneſs was, a ſhip arriving early in the ſeaſon with fever on board, and ſending their ſick on ſhore amongſt the inhabitants.

An eminent ſurgeon of St. John's, to whom I recommended the bark treatment of fever, informed me, that it had ſucceeded in every caſe he had tried it: and another eminent ſurgeon, who was my firſt aſſiſtant on board the Saliſbury the firſt voyage, 1786, and ſettled that year at St. John's, allowed it to be ſuperior to any other method of treatment; but honeſtly acknowledged that he could not afford to adminiſter it in common practice to his *agreement* patients.

This year we had 64 fever patients, beſides myſelf, who was ill, and had a ſevere relapſe. Dyſenteric ſymptoms were the moſt urgent in my own caſe. More caſes occurred in March than in any other month. They all recovered under my uſual method of treatment.

We had more itch patients than I ever had

under my care, excepting on board of a seventy-four, in one cruise during the war.

The 27th October, we sailed from St. John's, in company with the Nautilus, and arrived at Spithead the 9th November, without a fever patient on the list, and were paid off the 28th November.

I have been so full on the treatment of fever in the former parts of this work, that I will not detain the reader any longer at present with what I have further to lay before him on that head; but refer him to my Essay on Fever, which will very soon be published.

CHAP. IV.

TABLE.

Shews the Number of FEVER PATIENTS *on board his Majeſty's Ship the* SALISBURY, *from the 8th of March*, 1786, *to the 28th of November*, 1788; *and the Proportion of Deaths.*

Number of Fever Patients.	Died.
159 *	None.
Proportion of Deaths.	None died.

* The contraſt between the ſucceſs ſtated in this and the Table of Part V. is ſo ſtriking, as to attract every reader's attention, and ſhows mankind of how very high importance it is, to call in medical aſſiſtance at the commencement of fever; and to adminiſter the bark then liberally, paying regard to the effects only, and not to the quantity or number of the doſes, nor to the colour of the bark.

Of the caſes which occurred in January, February, March, April, and May, 1787, the diary of which is miſlaid, 19 were ſent to Haſlar hoſpital, who all recovered. Thoſe ſent to St. John's hoſpital were under my own care, therefore no notice is taken of them—but they all recovered.

CONCLUSION.

I HAVE laid before the reader my obſervations on Jail, Hoſpital and Ship Fever for upwards of thirteen years; and having had a predilection for the ſubject, I have been the more attentive in forming them; and I hope it has been demonſtrated, "That "infection may be diſtinguiſhed from any "other diſeaſe," and that the reader will be impreſſed with the perſuaſion founded on experience, "That bark far excels all other re-"medies extolled for curing ſhip fever; and "that delaying to adminiſter bark early and "liberally in fever, has hitherto been, and "may be, productive of the moſt fatal effects "to mankind." To ſupport theſe aſſertions, irrefragable proofs were requiſite, and I have adduced them in a ſeries of facts, the reſult of long experience, extenſive practice, and attentive obſervation.

My experience authoriſes me to repeat (as I never in any one caſe of ſhip fever on board the Edgar, Romney, Blenheim, nor

Saliſbury, diſcovered petechiæ, though diligent ſearch was made for them), that petechiæ is no pathognomonic ſymptom of ſhip fever, but ſolely depends on the conſtitution or on the management of the ſick. Nor have I found, in any ſituation whatever, either from enquiry, or obſervation, ſhip fever to be ſo highly contagious and fatal, as to render ſhips at all unſerviceable; but on board of ſuch as the antiphlogiſtic method was practiſed. This is not meant as a reflection on the ſurgeons of ſhips—it can be none—becauſe that method, with very few exceptions, has invariably been the univerſal practice, and, ſo far as I know, taught in the ſchools by every profeſſor of medicine, one only excepted*; and it is, therefore, mentioned only to lament, that a practice ſo deſtructive ſhould have been hitherto ſo univerſal.

When the unprejudiced reader, who is acquainted with the writings of phyſicians, wherein are expreſſed, and ſtrongly inculcated, their apprehenſions of the direful effects which are to follow an early and liberal ad-

* John Brown, and his doctrine I never heard of, until the end of December, 1786.

miniſtration of bark in fever, ſeriouſly conſiders the hiſtorical facts adduced in the Phyſical Journal, and preceding obſervations, in direct contradiction to thoſe writings, he will neceſſarily be led to infer, "That the idea of "the bad effects which they ſuppoſed were "to enſue from the bark practice in fever, muſt "have originated from falſe theories of their "own or of their favourite profeſſors or authors, "and not from their own experience nor obſer-"vation." He will alſo conclude, as the bark practice in the navy, where men labour under great diſadvantages, and are more intemperate than on ſhore, has been found not only innocent, but effectual, when given liberally in the beginning of fever, even without any previous evacuation, and ſo far excels other methods of cure, as has been demonſtrated by numerical calculations—"That the only objection, which "prevents the practice from being adopted "on ſhore, appears to ariſe from falſe theory, "or to be grounded on unjuſt prejudice."

If, indignantly, refuſing to hearken to reaſon on the moſt trivial ſubject be thought illiberal, how are we to judge of thoſe who diſregard facts which relate to the moſt intereſting of all ſubjects, the preſervation of mankind,

mankind, only becauſe they militate againſt their darling hypotheſis?

Should the opponents to the bark practice retort my own words, reſpecting thoſe who die under it, "That *ſome of their* patients died "only becauſe *they* had not taken a ſufficient "quantity of *their* medicines to effect the "cure;" and ſhould I grant the poſition, it would only then place their practice in the moſt diſadvantageous point of view; becauſe it appears (in the comparative table of the ſucceſs of different methods of treatment of fever) that for one patient who has died under the bark treatment, ſixteen have died under the other methods of treatment; and in a vaſt number of inſtances, a much greater proportion. Indeed I have no doubt, but the bark will always be found ſuperior to all other remedies in curing fever. At preſent, the view of the difference of the ſucceſs of the different methods of treatment of fever, therefore, exhibits a very intereſting object to mankind; but more particularly to Government. Becauſe, though (from theſe and future obſervations) the bark treatment of fever may become general on ſhore, *the indigent eſtabliſhment of the Naval Surgeons will never*

permit them to put it in practice in the Navy. —The conſequence is obvious———————————; and

The ſubject viewed in this ſerious light appears ſo alarming and ſo delicate, that a perſon in public ſervice cannot proſecute it further than I have done in my Phyſical Journal, and in the preceding obſervations, where ſo many ſingular and ſtriking facts are ſtated. I therefore preſent it, with all its importance, to thoſe who have the power to remedy it, and, I truſt, will ſoon put their power in force.

To theſe obſervations I might add many more, both of my own and of other gentlemen, who adopted the bark treatment upon my recommendation, were it not for fear of ſwelling the volume; and Mr. Cairncroſs, ſurgeon of the ſecond battalion of the 73d regiment, obligingly furniſhed me with ſome very much to the purpoſe. But ſince it might be objected to theſe proofs, however valid or pertinent they may be, that they did not fall under my own obſervation, I purpoſely decline inſerting them: and ſhould the objection be ſtill made to the few which I have inſerted, I beg leave to anſwer, That

as

as very few medical practitioners will ever have so many cases come under their care, as are comprehended in the preceding observations; and as few readers, from their own experience, will have reason to deny their validity, I trust, they will not be more rash to condemn, nor to reject them from prejudice or hear-say, than I have been to obtrude on them the observations of others.

But, for the validity of my observations, I readily appeal to their candour who have had equal opportunities to make observations, and to compare the success of various methods of cure. To such observations as are fully and fairly stated, I will pay all due respect; but (*nullius addictus jurare in verba magistri*) I pay no regard to names or to hypotheses, be they ever so splendid or authoritative.

In a word, I am perfectly satisfied that every practitioner may be fully convinced of the truths stated in the preceding observations, if they will take proper steps; *i. e.* if, divesting themselves wholly of prejudice, they will make a conscientious trial of the bark treatment of fever, as I have done, and compare the success with that of all other

methods which have been hitherto adopted; recollecting, that to make the trial properly, it muſt be an invariable rule *to give the bark liberally and early, ſo early as, in a manner, to prevent the fever, and to be guided only by its effects, without regarding its colour, the quantity or number of the doſes*, as already mentioned.

In ſtating my obſervations I have been more ſtudious to be accurate and diſtinct, than ambitious to obtain the character of a fine writer; and, ſatisfied that I have ſtated important facts, I ſhall think myſelf happy if I have done it intelligibly, and ſtill happier if it ſhall be found that I have contributed to the preſervation of my fellow-creatures, with the hopes of which I may reaſonably flatter myſelf, unleſs I can be perſuaded that the *nature* of infection and the *properties* of bark ſhall hereafter entirely change.

Finally, after having ſerved Government near thirty years, and ſacrificed a good conſtitution by frequent attacks of fever, incurred by attending my duty in various climates; the only recompenſe which I enjoy for the irretrievable loſs of that bleſſing, is the reflection that I have been, and I truſt

truſt ſhall be, under Providence, inſtrumental in preſerving many lives, which, in all human probability, would have fallen victims to a contrary practice: a recompenſe that, were it poſſible, would be too cheaply bartered for any thing in the power of man t beſtow.

FINIS.

ERRATA.

Page 197, for 27*th*, in the last line, read 37*th*.
—— 209, line 9, for *hammac*, read *hammacoe*.
—— 213, —— 10, for *sumatur*, read *sumat*.
—— 219, —— 14, for *atque*, read *cum*.
—— 220, —— 5, after *C. C. gr.* read *v.*
—— 234, —— 15, for *potione*, read *potionem*.
—— 247, —— 15, after *life*, add *a comma*.
—— 287, —— 7, for *would*, read *will*.
—— 293, —— 12, add *The thermometer was between* 52 *and* 64.
—— 303, —— 16, for *every one*, read *the inhabitants*.
—— 316, —— 22, after *thirty*, read *We got forty-three men out of a cartel ship from Spain, on board of which were thirty ill of fever. On my application the forty-three men were stripped naked, &c.*
—— 319, —— 15, for *us*, read *the Edgar*, and for *our*, read *the*.
17, after *the*, read *enemy's*.
18, dele *to us*.
—— 349, —— 2, after *along*, add *a comma*.
—— 366, —— 12, after *sudorifics*, read *are*.
13, after *repeated*, read *after the first or second night*.
—— 371, —— 1, after *ourselves*, read *in others*.
—— 415, —— 14, for *upset*, read *overset*.
19, after *and*, read *each of them a dose of*.

N. B. Wherever the Author has spoken of himself in the plural, throughout the work, as *we*, *ourselves*, *our*, &c. the Reader is requested to substitute *I*, *myself*, *my*, &c.